Infinity

PRELUDE MTS SUBWOOFER

SERVICE MANUAL

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REV 4 3/2006

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Prelude MTS Subwoofer Specifications

Frequency Response:	23Hz – 80Hz (±3dB); 30Hz – 80Hz (±1.5dB)
Maximum Amplifier Output:	850 watts continuous; 2600 watts peak (Into 8 Ω from 20Hz – 100Hz with no more than 0.1% THD)
2nd- and 3rd-Order Harmonic Distortion: (20Hz – 20kHz @ 95dB SPL)	<1%
Crossover Frequency:	80 Hz
Dimensions:	20" x 9-1/2" x 20-1/2" (508mm x 241mm x 521mm) 20" x 13" x 20-1/2" (including foot) (508mm x 330mm x 521mm)
Weight:	72 lbs./32.6 kg.

Infinity continually strives to update and improve existing products, as well as create new ones. The specifications and details in this manual and related Infinity publications are therefore subject to change without notice.

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Detailed Specifications

LINE VOLTAGE		Hi/Lo Line	Nom.	Unit	Notes
US 120vac/60Hz		108-132	120	Vrms	Normal Operation
EU 230vac/50-60Hz		207-264	230	Vrms	Normal operation, MOMS required

Parameter	Specification	Unit	Limits	Conditions	Notes
Amp Section					
Type (Class AB, D, other)	AB	--	--	HC-BASH Power Supply	
Load Impedance (speaker)	6	Ohms	--	Nominal	Z-curve required
Rated Output Power	1000	Watts	950	1 input driven	760w/8 ohms (driver load impedance)
THD@ Rated Power	0.1	%	0.8	22k filter	1000w
THD @ 1 Watt	0.3	%	1	22k filter	
Polarity	0	deg.	0° ±20	In phase at 50Hz	.250 faston (+).....205 faston (-)
DC Offset	20	mV-DC	50	@ Speaker Outputs	
Damping factor	>50	DF	--		
Input Sensitivity					
Input Frequency	35	Hz	35	Nominal Freq.	1 input driven
Line Input	350	mVrms	±2dB	To Rated Power	1 input driven
Speaker/Hi Level Input	7	Vrms	±2dB	To Rated Power	(-26dB below Line In)...1 input driven
Signal to Noise					
SNR-A-Weighted	100	dBA	90	relative to rated power	A-Weighting filter
SNR-unweighted	70	dBr	70	relative to rated power	22k filter
SNR rel. 1W-unweighted	60	dBr	55	relative to 1W Output	22k filter
Residual Noise Floor	2	mVrms	3	Volume @max, using RMS reading DMM/VOM (or A/P)	
Residual Noise Floor	1.5	mVrms(max)	2	Volume @max, w/ A/P Swept Bandpass Measurement (Line freq.+ harmonics)	
Input Impedance					
Line Input	20k	ohms	N/A	Nominal	
Speaker/Hi Level Input	4.7k	ohms	N/A	N/A	
Active Filters					
Low Pass (fixed or variable)	fixed	--	--		
Low Pass filter (point or range	1k (direct), 80 (normal)	Hz	±2dB		
Slope	24	dB/Octave	--		
Q	0.707	Damping	--		
Additional filter (LPF)	30	Hz	±2dB		
Slope	6	dB/Octave	--		
Q	0.707	Damping	--		
Subsonic filter (HPF)	10	Hz	±2dB		
Slope	12	dB/Octave	--		
Q	0.707	Damping	--		
Parametric EQ (RABOS)					
Frequency Pot	yes	--			
Range	20-80	Hz	20-80	21 detent pot (0.1 oct. steps)	
Notch Filter Level Pot	yes	dB/Octave	--		
Range	0 to -10	dB	±2dB	21 detent pot (0.5dB steps)	
Notch Filter Width(Q) Pot	yes	dB/Octave	--		
Range	0.1-0.5	octave	functional	21 detent pot (5steps/0.1 octave)	
Line Out with 80Hz HPF	80	Hz	--		
Slope	12	dB/Octave	±2dB		
Q	0.707	Damping	--		
Limiter	Yes				
Features	--				
Input Select Switch	yes	--	functional	3-P switch:	Positions 1&2= Line in, position 3=Hi-Level In
Line Output (w/80Hz HPF)	yes	--	±2dB		
Volume pot Taper (lin/log)	linear	--	functional		Backlight level control using Green LED
Input Configuration	--	--			
Line In (L,C,R,AC3,Mono)	Mono	--	functional		
Spkr/Hi Level In (L,C,R,mono)	Mono	--	functional		
Line Outputs (L,C,R)	Mono	--	N/A		
Signal Sensing (ATO)			--		Green=ON / Red=Standby
Auto-Turn-On (yes/no)	yes	--	functional		Backlight AC Power Sw. w/ Bi-Color LED
ATO Input Frequency	1k	Hz	functional		
ATO Level	2	mV	functional	2mV@50Hz into Line Input w/ 1 ch. driven	
ATO Bandwidth	5k	Hz	functional	ATO-LPF for noise immunity	

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Detailed Specifications (Cont.)

Parameter	Specification	Unit	Limits	Conditions	Notes
ATO Turn-on time	5	ms	functional	Amp connected and AC on, then input signal applied	
Auto Mute/ Turn-OFF Time	15	minutes	functional	T before muting, after signal is removed	
Power on Delay time	3	sec.	4	AC Power Applied	
Transients/Pops					
ATO Transient	10	mV-peak	20	@ Speaker Outputs	
Turn-on Transient	500	mV-peak	1v-pp	@ Speaker Outputs	AC Line cycled from OFF to ON
Turn-off Transient	500	mV-peak	1v-pp	@ Speaker Outputs	AC Line cycled from ON to OFF
Efficiency					
Stand-by Input Power	10	Watts	15	@ nom. line voltage	
Power Cons.@rated power	1250	Watts	N/A	@ nom. line voltage	
Efficiency	80%	%	70	@ nom. line voltage	
Protection					
Short Circuit Protection	preferred		functional	Direct short at output	
Thermal Protection	yes			@1/8 max unclipped Power	
DC Offset Protection	yes			DC present at Speaker Out lea	Relay or crowbar (for driver/fire protection)
Line Fuse Rating	6	Amps		Type-T or Slo Blo	External fuse with UL/SEMKO rated holder

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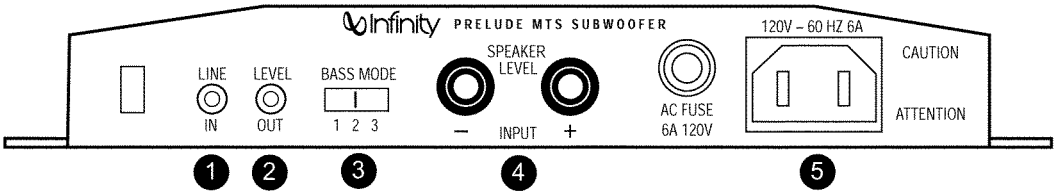
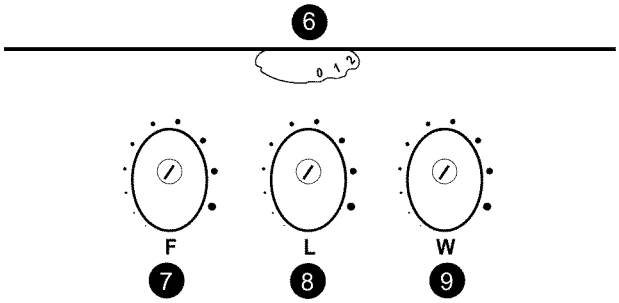
Controls and Connections

Subwoofer Rear Panel



Subwoofer Front Panel



1. Line-Level-Input Connector
2. Line-Level-Output Connector
3. Bass-Mode Switch
4. Speaker-Level Input
5. AC-Cord Input
6. Subwoofer-Level Control

R.A.B.O.S. Controls

7. Center-Frequency Adjustment
8. R.A.B.O.S. Level
9. Bandwidth Adjustment

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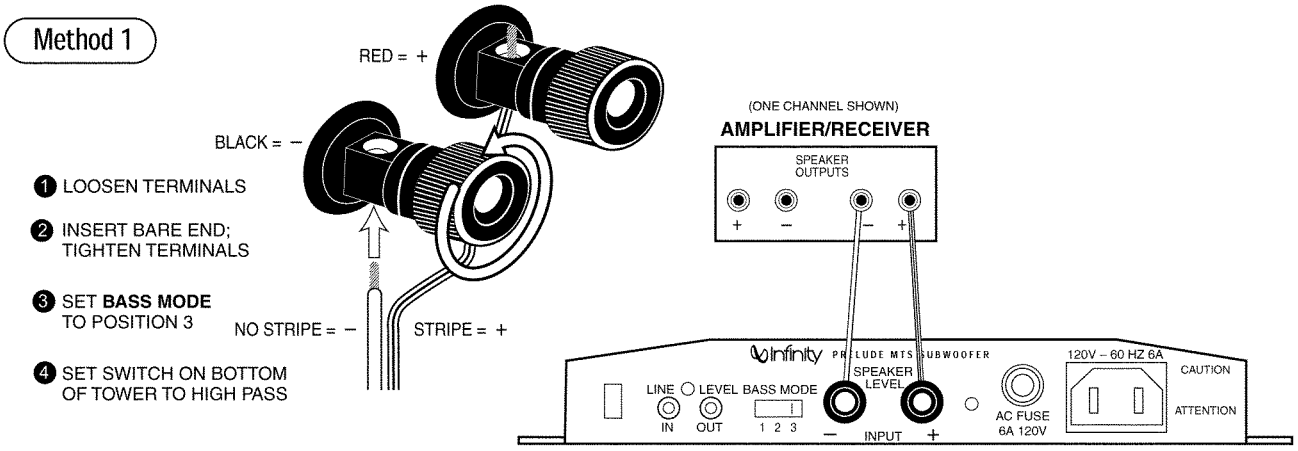
The Infinity Prelude MTS offers unprecedented flexibility for connecting the system to any type of audio or home-theater system. Consult the table at right to determine which system description most closely matches your own, then follow the hook-up method corresponding to that system.

If none of these system configurations seem to match yours, consult your dealer or Infinity customer service for direction on how best to hook up your system.

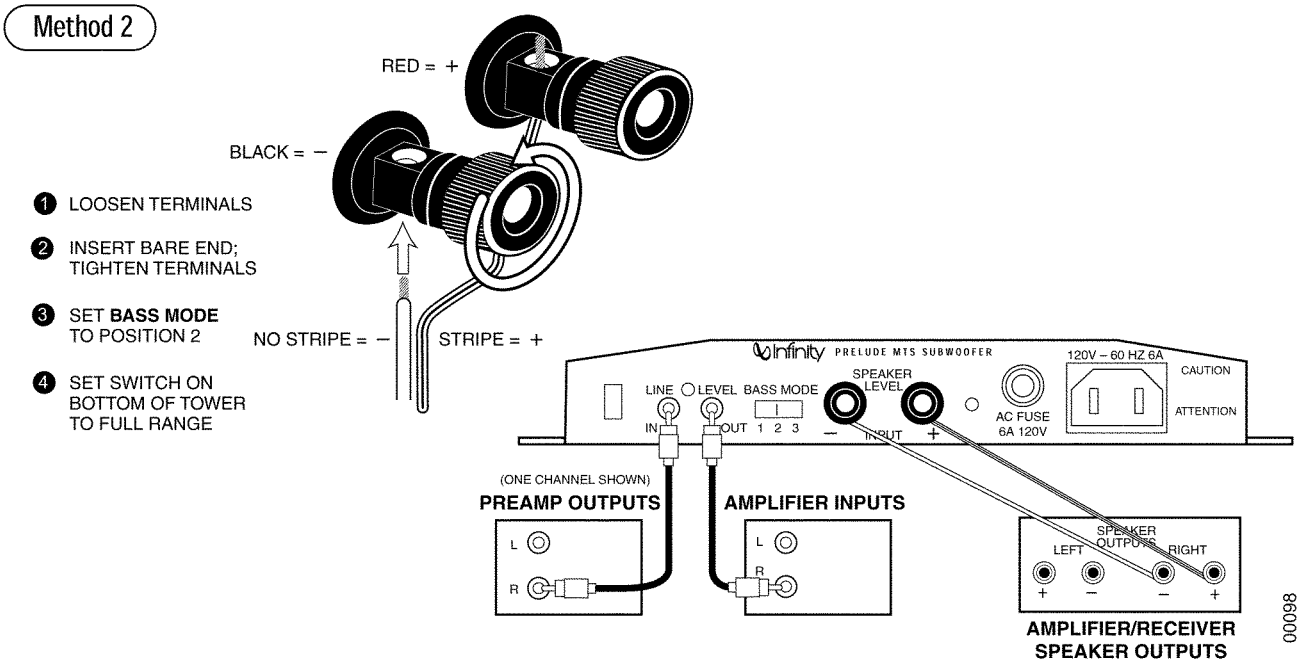
For Methods 2, 3a, 3b and 4, make sure all bass-management features are properly set. The Audio channels should all be set to "Small" or "High-Pass" and the subwoofer set to "On."

System Type	Connection Methods
2-Channel receiver or integrated amplifier that has no subwoofer output or Pre-out/Main-In connectors	1
2-Channel receiver or integrated amplifier with preamp output and input connectors	2
2-Channel system with separate preamplifier and power amplifier	2
Dolby Pro Logic with THX, Dolby Digital, or DTS® receiver with a filtered subwoofer (or LFE) output connector	3a
Dolby Digital or DTS processor with separate power amplifiers or multichannel amplifier	3b
Non-THX certified Dolby Pro Logic receiver with full-range subwoofer outputs	4

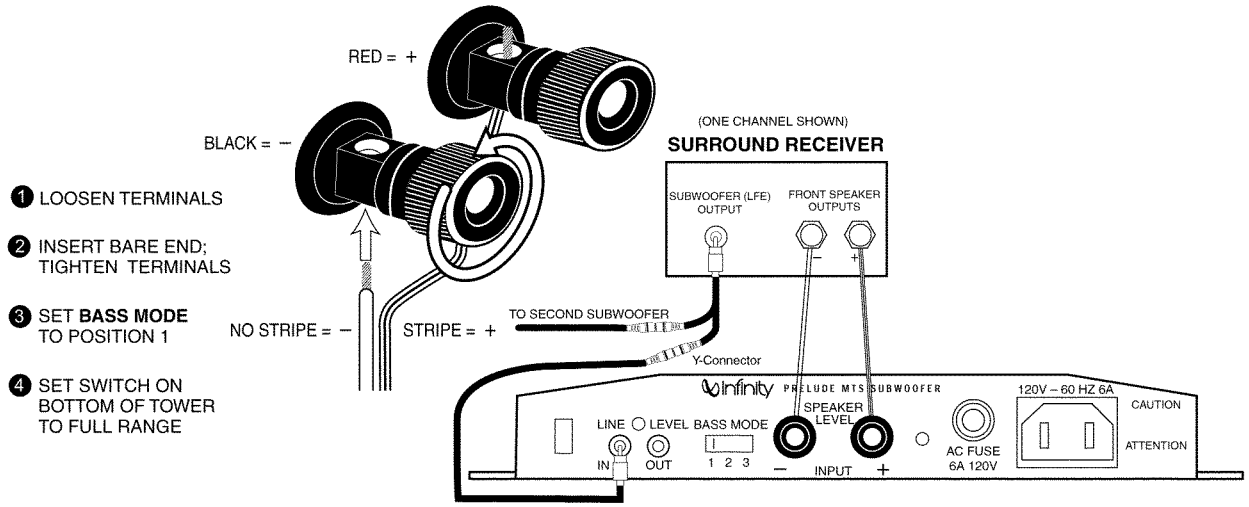
Method 1



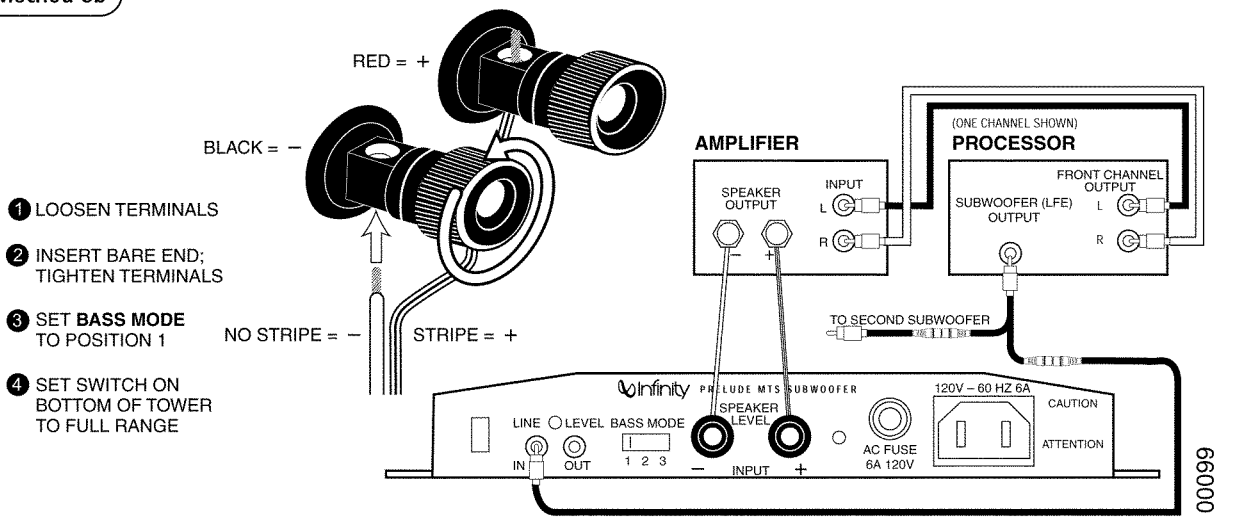
Method 2



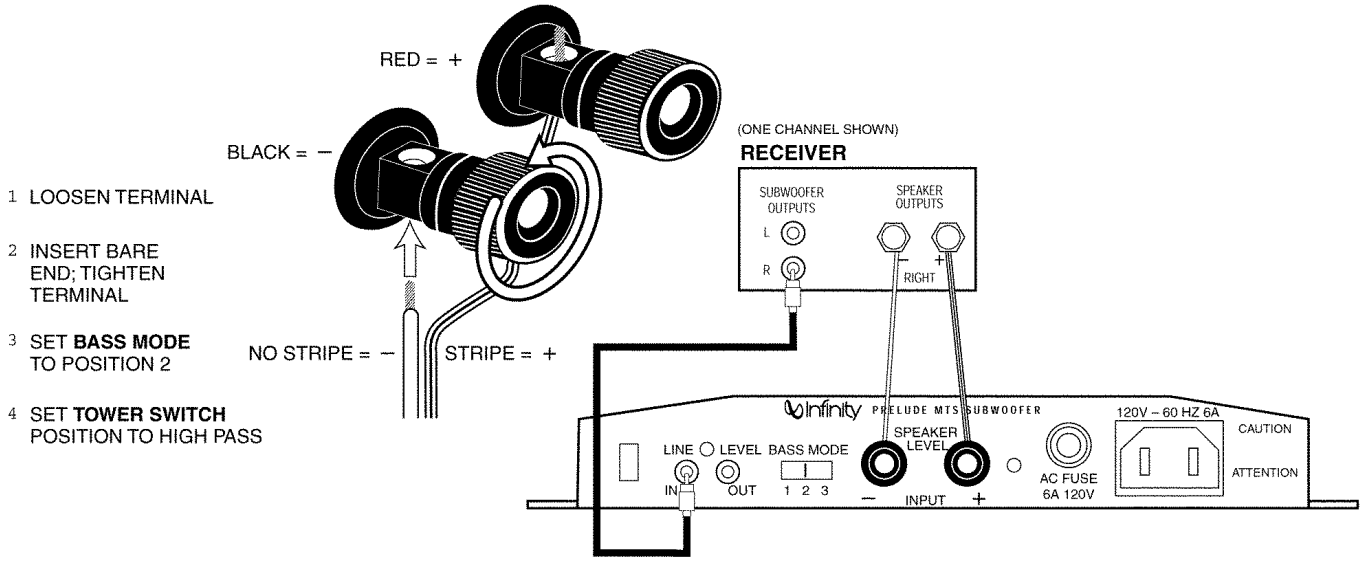
Method 3a



Method 3b



Method 4



After correctly connecting the Prelude MTS and verifying that both the subwoofer and tower portions are playing, it is time to optimize the system for your particular listening room.

Final Positioning

Earlier, you placed the loudspeakers in their general location. Finding the exact location for optimum performance sometimes only involves moving the speakers up to a few inches in any direction. We urge you, therefore, to experiment with placement until your speakers deliver their full potential. When the speakers are moved inward (toward each other) there is generally better focus of instruments and vocalists; however, moving the speakers too close together can reduce the spaciousness of the stage effect and you may need to experiment with the trade-off between focus and imaging. If your listening room is larger than average and your listening position is relatively far from the speakers, wider placement of the speakers may be required.

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Operation

The operation of the Prelude MTS system, and the proper settings for the Room Adaptive Bass Optimization System, or R.A.B.O.S., is thoroughly covered in the Owner's guide, part# 335060-005.

For service purposes, the R.A.B.O.S. system is canceled when all three front panel controls (F) (L) (W) are turned fully CW.

If the subwoofer amplifier is driven by the Speaker Level Inputs only, the Bass Mode switch on the rear panel should be set to "3"; if driven by the RCA "line In" input, position "1" or "2".

The only other control of concern is the Main Level Control on the front panel, which operates like a traditional potentiometer.

Amplifier Removal

To remove the main amplifier assembly:

1) Remove the Cosmetic Top Cap; pull gently to disengage from the rubber cups.
2) Remove the (2) ¾" Black Philips wood screws from the top front of the amp assembly.
3) Turn the entire subwoofer upside-down; place on a padded surface.
4) Remove the entire front foot; (4) ¾" Black Philips wood screws and (2) 1/2" Black Philips machine screws
5) Disengage amplifier from cabinet; remove all terminals and connectors necessary.

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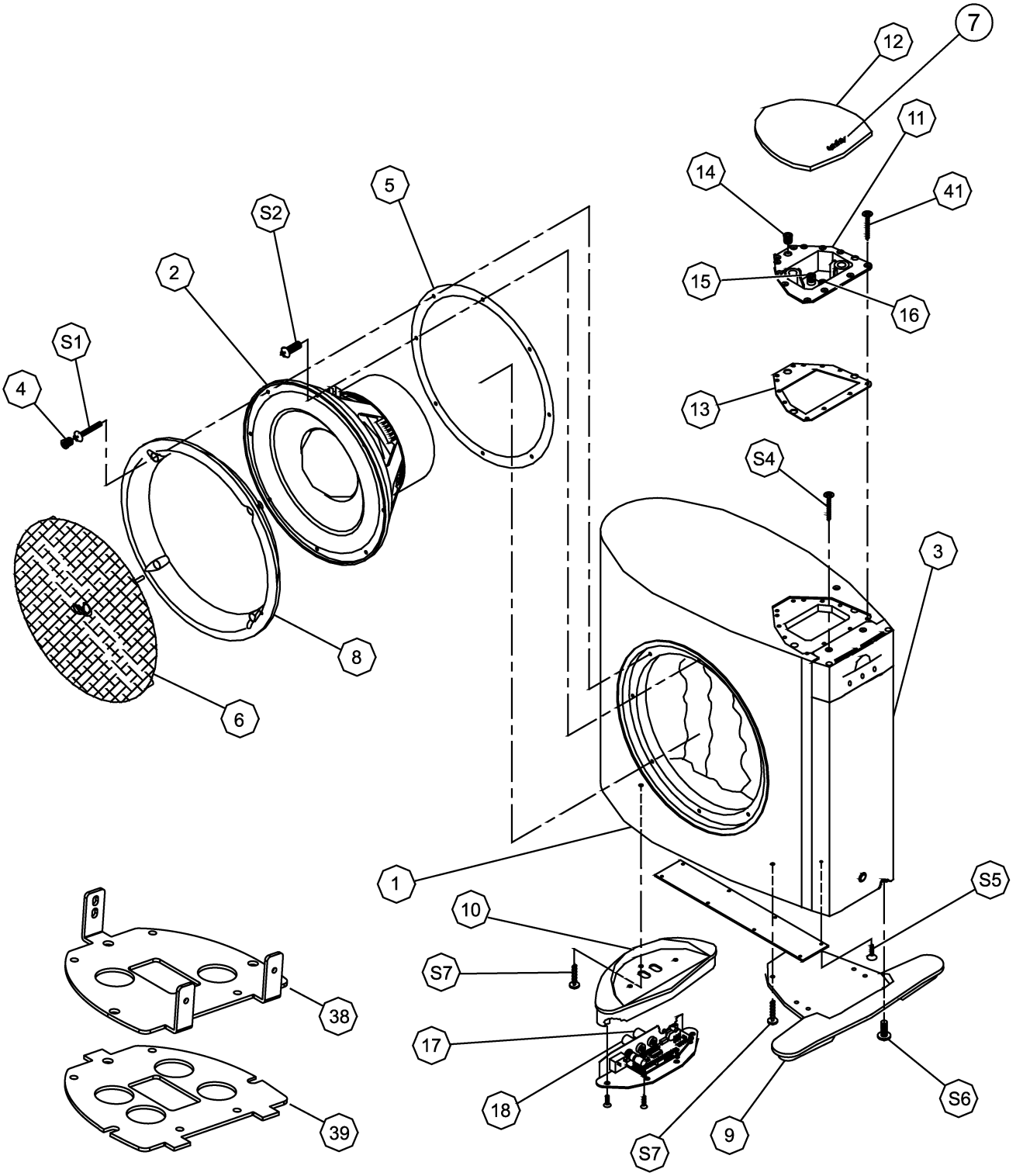
Mechanical & Packaging Parts List

1	**Cabinet**	Prelude MTS Subwoofer (Not for Sale)	
2	**Low Frequency Transducer (Woofer)**	12” Cast frame C.M.M.D., Shielded DC Resistance 7.6 ohms ±10%	335036-001
3	**Complete Subwoofer Amp assembly**		Not For Sale
4	**Woofer Grille retainers (4)**		66815-01
5	**Woofer gasket**		335481-001
6	**Woofer Grille**		335037-001
7	**Cosmetic Cap Logo**		335351-001
8	**Woofer Trim Ring**		335040-001
9	**Front Foot**		335038-001
10	**Rear Foot**		335244-001
11	**Terminal Connector Plate**		335247-001
12	**Cosmetic Cap**		335256-001
13	**Cosmetic Cap Gasket**		335360-001
14	**Cosmetic Cap Grille retainers (3)**		333249-001
15	**Binding Post, BLK, Tower Conn.**		335358-001
16	**Binding Post, RED, Tower Conn.**		335358-002
17	**Binding Post, BLK, Rear Panel**		JC0151
18	**Binding Post, RED, Rear panel**		JC0150
19	**Subwoofer Outer Carton**		335059-001
20	**Subwoofer Top End Pad**		335058-001
21	**Subwoofer Bottom End Pad**		335058-002
22	**System Owner’s manual**		335060-005
23	**Warranty Card**		335841-001
24	**Survey Card**		335868-002
25	**Power Cord**		WI0043
26	**Double-ended Banana Plug**		335357-001
27	**Hardware Kit**		335849-001
28	**Alignment Pins (2)**		335348-001
29	**Spike foot set**		331360-001
30	**T-Handle Allen Key**		335851-001
31	**RABOS Complete kit**		335852-001
32	**RABOS Test CD**		335855-001
33	**RABOS Sound Level Meter**		335368-001
34	**RABOS Key (Screwdriver)**		091-00121-000
35	**RABOS Q-Finder**		335856-001
36	**RABOS Pouch**		335853-001
	9 Volt Battery		

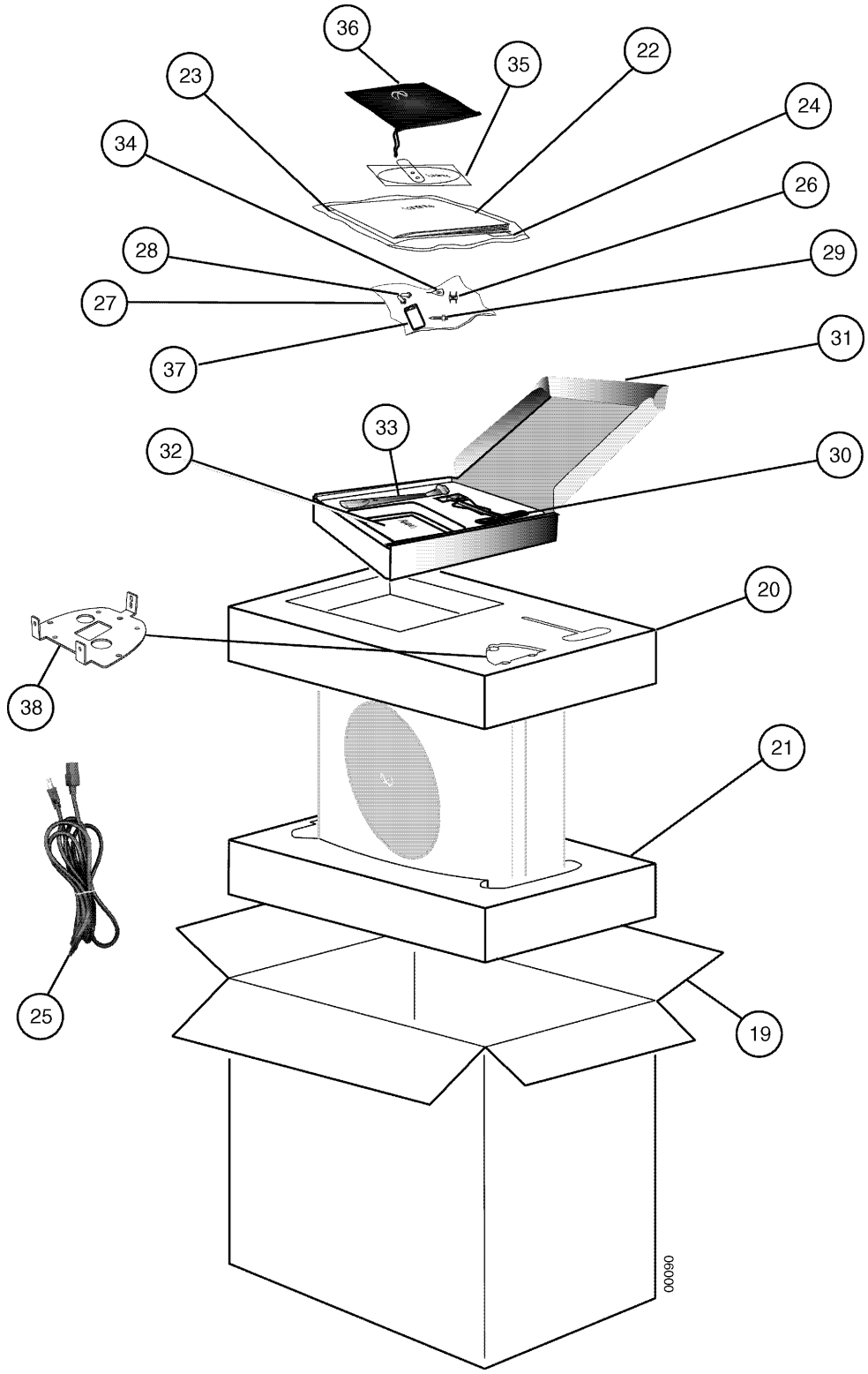
Mechanical & Packaging Parts List (Cont'd)

38	Connector Plate		335249-001
39	Connector Plate Gasket		335355-002
S1	Screw (4)	PPH #10-32 x 1 BLK	900401-016
S2	Screw (4)	PPH #10-32 x .75 BLK	900401-012
S3	Screw (8)	PB FPH #10 x .625 BLK	908401-010
S4	Screw (2)	PB FPH #10 x .75 BLK	908401-012
S5	Screw (8)	PB FPH #6 x .5 BLK	903901-008
S6	Screw (2)	MS PPH #10-32 x .625 BLK	900401-010
S7	Screw (7)	PPH #8 x .75 BLK	900101-012

Exploded View



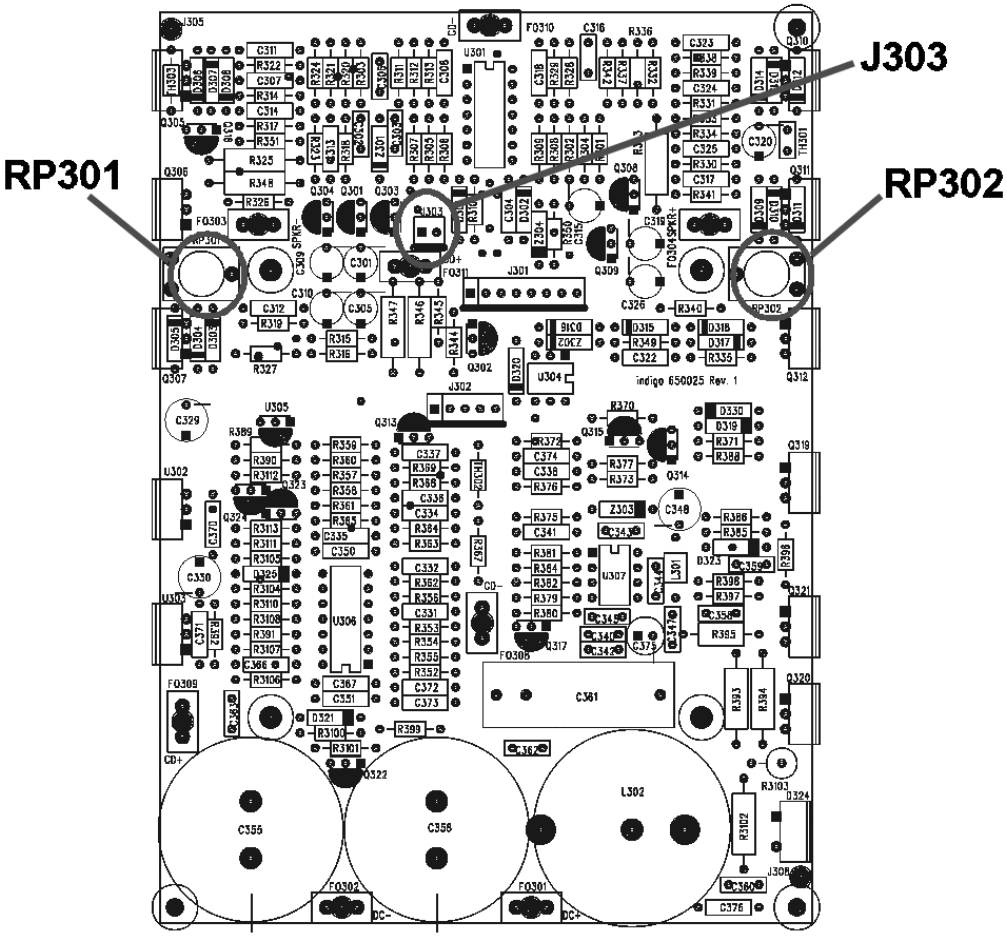
Packaging



PRELUDE MTS ADJUST BIAS PROCEDURE

(Mandatory when any output MOSFET transistors Q305,310,320,321,306,307,311,312 are replaced)

1. Amplifier should be unplugged and OFF.
2. Remove Amp assembly from cabinet, following the instructions on Page 10.
3. Identify the Linear board assembly (PCB with the output transistors)
4. Adjust RP301 and RP302 fully Counter Clockwise. See diagram below.
5. Apply 120 VAC power to unit; turn power switch ON.
6. Verify LED illuminates on the front gain control dial, unless you have disconnected the plug.
7. Connect voltmeter set to DC millivolt range to twin pins on terminal J303, on Linear board.
8. Verify initial voltage is less then 0.1 mV.
9. Adjust RP301 Clockwise until voltmeter reads **0.3 mV** + the initial current from step #8.
10. Adjust RP302 Clockwise until voltmeter now reads **0.6 mV** + the initial current from step #8.
11. Turn amplifier OFF. Disconnect AC power to unit.
12. Remove voltmeter from terminal J303.
13. Replace amp assembly back into cabinet.



Prelude Amp Assembly Parts List

Part#	Description	Qty		Designator
630050	PCB, INPUT FEATURE	1	EA	
	Integrated Circuits			
UA0003	OPAMP, QUAD 14PIN DIL LM324N	1	EA	U203
UA0009	OPAMP, QUAD 14P DIL TL074/084	2	EA	U201,U202
	Diodes			
DS0001	RECT, 100mA 75V SIGNAL 1N4148T	9	EA	D201,202,203,204,205,206,207,208,209
DL0013	LED, 5MM ROUND DIFF GREEN	2	EA	D210,D213
	Transistors			
QB0017	TRANS, NPN 150V 0.6A 2N5551	1	EA	Q204
QM0035	JFET, N-CH J111 TO92 TR	3	EA	Q201,Q202,Q205
	Capacitors			
CE0003	CAP, E 2.2UF 50V 20% 105C	2	EA	C210,C211
CF0045	CAP, F .1UF 63DC 5% 5MMLS	5	EA	C204,C205,C206,C207,C208
CC0082	CAP, CA .1UF 50V 20%	3	EA	C209,C212,C213
CC0099	CAP, C 47P 50V 10 AXIAL	1	EA	C201
	Resistors			
RC0004	RES, CF 1.0M 1/4W 5%	3	EA	R224,R233,R234
RC0006	RES, CF 10K 1/4W 5%	8	EA	R227,228,231,232,236,237,238,274
RC0037	RES, CF 2.0K 1/4W 5%	2	EA	R230,R235
RC0049	RES, CF 3.3K 1/4W 5%	1	EA	R273
RC0083	RES, CF 100K 1/4W 5%	1	EA	R229
RC0273	RES, ZERO OHM 1/4W	4	EA	R207,R209,R210,R214
RM0001	RES, MF 1K 1/4W 1%	2	EA	R223,R272
RM0002	RES, MF 10K 1/4W 1%	8	EA	R203,204,217,219,222,241,245,248
RM0003	RES, MF 15K 1/4W 1%	2	EA	R244,R247
RM0012	RES, MF 100 ohms 1/4W 1%	1	EA	R218
RM0019	RES, MF 1.3K 1/4W 1%	1	EA	R202
RM0024	RES, MF 2.21K 1/4W 1%	1	EA	R221
RM0075	RES, MF 475 ohms 1/4W 1%	1	EA	R216
RM0076	RES, MF 562 ohms 1/4W 1%	1	EA	R249
RM0078	RES, MF 680 ohms 1/4W 1%	1	EA	R271
RM0080	RES, MF 825 ohms 1/4W 1%	2	EA	R243,R246
RM0091	RES, MF 3.65K 1/4W 1%	1	EA	R242
RM0115	RES, MF 23.7K 1/4W 1%	1	EA	R201
RM0195	RES, MF 187K 1/4W 1%	1	EA	R212
RM0269	RES, MF 93.1K 1/4W 1%	1	EA	R215
RM0271	RES, MF 110K 1/4W 1%	1	EA	R251
RM0281	RES, MF 6.04K 1/4W 1	2	EA	R225,R270
RM0315	RES, MF 2.67K 1/4W 1%	1	EA	R240
RM0369	RES, MF 340 ohms 1/4W 1%	2	EA	R220,R226
RM0370	RES, MF 9.31K 1/4W 1%	1	EA	R205
RX0001	RES, MO 1K 1W 5%	1	EA	R239
RP0087	POT, A10K DUAL 12MM HOR SEL	2	EA	RP202,RP203

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
RP0088	POT, C10K DUAL 12MM HOR SEL	1	EA	RP204
RP0089	POT, A100K 9MM HORIZ SELECTED	1	EA	RP201
	Misc.			
JH0004	CNCTR, HEADER 6PIN .100CTR	1	EA	J201
JH0074	CNCTR, HEADER 8PIN LOCKING .1C	1	EA	J202
HS0047	SCREW, #6-32X3/4 PAN PHIL BLK	4	EA	USED ON THE STANDOFFS
MZ0034	STANDOFF, 3/8" SPACER NYLON	4	EA	H1,H2,H3,H4
RP0096	POT, KNOB PRELUDE GAIN	1	EA	USED ON RP0089
650025	**PCB, LINEAR/BUCK**	**1**	**EA**	
	Integrated Circuits			
UA0003	OPAMP, QUAD 14PIN DIL LM324N	1	EA	U306
UA0009	OPAMP, QUAD 14P DIL TL074/084	1	EA	U301
UF0013	FOTO, 6PIN MOC3012	1	EA	U304
UP0004	PWM, 8PIN DIL UC3842N	1	EA	U307
	Regulators			
UV0007	VREG, LINEAR TO220 -5V LM7905CT	1	EA	U303
UV0013	VREG, +5V 100MA TO220 LM7805CT	1	EA	U302
	Diodes			
DS0001	RECT, 100mA 75V SIGNAL 1N4148T	24	EA	D301,302,303,304,305,306,307,308,309, 310,311,312,313,314,315,316,317,318, 319,320,321,323,325,330
DZ0002	ZENER, 500mW 12V 5% 1N5242B	1	EA	Z303
DZ0021	ZENER, 500MW 15V 5% 1N5245B	2	EA	Z301,Z302
DZ0034	ZENER, 500MW 10V 5% 1N5240B	1	EA	Z304
DR0085	RECT, 8A 400V TO220AC MUR860	1	EA	D324
DZ0018	ZENER, 2.5-37V SHUNT TL431CLP	1	EA	U305
	Transistors			
QB0002	TRANS, NPN 40V .6A TO92 2N4401	3	EA	Q314,Q315,Q317
QB0017	TRANS, NPN 150V 0.6A 2N5551	4	EA	Q303,Q308,Q322,Q323
QB0018	TRANS, PNP 150V 0.6A 2N5401	6	EA	Q302,Q304,Q309,Q313,Q316,Q324
QM0035-S	JFET, J111 SELECTED TR ONLY	1	EA	Q301
QB0033	TRANS, NPN 250V 1A TO220 TIP47	1	EA	Q319
QM0015	MOSFET, IRF640 TO220AB	4	EA	Q305,Q310,Q320,Q321
QM0032	MOSFET, IRF9640 T0220AB	4	EA	Q306,Q307,Q311,Q312
	Capacitors			
CC0020	CAP, CA 470PF 100V 5%	2	EA	C335,C366
CC0040	CAP, CA 4700PF 100V 10%	3	EA	C313,C324,C331
CC0059	CAP, CA .1UF 100V 20%	7	EA	C304,C311,C312,C322,C323,C372,C373
CC0065	CAP, CA 2200P 50V 5%	2	EA	C337,C367
CC0072	CAP, CA 100PF 100V 10%	1	EA	C341

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
CC0082	CAP, CA .1UF 50V 20%	4	EA	C350,C351,C370,C371
CC0087	CAP, CA .01UF 100V 20%	2	EA	C332,C338
CC0108	CAP, CA 22PF 50V 10	2	EA	C307,C317
CC0017	CAP, C 330PF 100V 10%	1	EA	C340
CC0021	CAP, C 470PF 1KV 10%	3	EA	C360,C362,C363
CC0032	CAP, C 2200PF 600V 10%	1	EA	C358
CC0078	CAP, C .22UF 50V 10% .2LS	1	EA	C344
CC0095	CAP, C 470P 100V 5	2	EA	C345,C347
CE0018	CAP, E 100UF 25V 20%	2	EA	C329,C330
CE0098	CAP, E 22UF 50V 20% 5X11 .2LS	5	EA	C301,C309,C310,C319,C320
CE0103	CAP, E 100UF 35V 85DEG	1	EA	C348
CE0106	CAP, E 22UF 35V BP 6X11 .2LS	3	EA	C305,C315,C326
CF0008	CAP, F 2200PF 100V 5% 5MMLS	1	EA	C342
CF0035	CAP, F .022UF 100V 5% 5MMLS	2	EA	C306,C316
CF0045	CAP, F .1UF 63DC 5% 5MMLS	2	EA	C302,C303
CC0079	CAP, C .1UF 50V 20% .1LS	1	EA	C343
CE0121	CAP, E 470UF 200V 20% 30X25	2	EA	C355,C356
CF0146	CAP, F 6.8UF 250V 10% 27MMLS	1	EA	C361
	Resistors			
RC0004	RES, CF 1.0M 1/4W 5%	1	EA	R399
RC0005	RES, CF 10K 1/2W 5%	1	EA	R388
RC0006	RES, CF 10K 1/4W 5%	2	EA	R310,R349
RC0061	RES, CF 4.7K 1/4W 5%	1	EA	R350
RC0083	RES, CF 100K 1/4W 5%	1	EA	R303
RC0087	RES, CF 330 ohms 1/4W 5%	6	EA	R323,R326,R327,R339,R340,R341
RC0116	RES, CF 330K 1/4W 5%	1	EA	R3107
RC0127	RES, CF 30K 1/4W 5%	1	EA	R3106
RC0128	RES, CF 33K 1/4W 5%	1	EA	R376
RC0135	RES, CF 150K 1/4W 5%	1	EA	R363
RC0229	RES, CF 200K 1/2W 5%	1	EA	R3103
RC0273	RES, ZERO OHM 1/4W	2	EA	R313,R395
RM0001	RES, MF 1K 1/4W 1%	5	EA	R344,R370,R371,R372,R3101
RM0002	RES, MF 10K 1/4W 1%	2	EA	R377,R380
RM0003	RES, MF 15K 1/4W 1%	2	EA	R312,R329
RM0011	RES, MF 100K 1/4W 1%	6	EA	R352,R353,R354,R364,R3104,R3105
RM0024	RES, MF 2.21K 1/4W 1%	4	EA	R315,R317,R331,R333
RM0031	RES, MF 3.32K 1/4W 1%	5	EA	R320,R321,R336,R337,R369
RM0035	RES, MF 4.75K 1/4W 1%	1	EA	R3108
RM0037	RES, MF 51.1K 1/4W 1%	1	EA	R367
RM0039	RES, MF 5.11K 1/4W 1%	1	EA	R304
RM0043	RES, MF 6.81K 1/4W 1%	5	EA	R319,R322,R335,R338,R384
RM0065	RES, MF 200 ohms 1/4W 1%	1	EA	R373
RM0069	RES, MF 274 ohms 1/4W 1%	2	EA	R390,R391
RM0071	RES, MF 332 ohms 1/4W 1%	2	EA	R389,R392
RM0073	RES, MF 392 ohms 1/4W 1%	2	EA	R324,R342
RM0079	RES, MF 750 ohms 1/4W 1%	2	EA	R3112,R3113
RM0082	RES, MF 1.21K 1/4W 1%	1	EA	R368
RM0083	RES, MF 1.50K 1/4W 1%	1	EA	R345
RM0084	RES, MF 1.65K 1/4W 1%	1	EA	R3100
RM0089	RES, MF 2.43K 1/4W 1%	1	EA	R382
RM0093	RES, MF 4.53K 1/4W 1%	4	EA	R316,R318,R332,R334
RM0113	RES, MF 20K 1/4W 1%	4	EA	R308,R309,R375,R381
RM0114	RES, MF 22.1K 1/4W 1%	1	EA	R361

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
RM0118	RES, MF 210 ohms 1/4W 1%	1	EA	R351
RM0120	RES, MF 30.1K 1/4W 1%	3	EA	R358,R360,R362
RM0139	RES, MF 267K 1/4W 1%	2	EA	R314,R330
RM0148	RES, MF 6.34K 1/4W 1%	2	EA	R302,R307
RM0165	RES, MF 24.9K 1/4W 1%	1	EA	R357
RM0180	RES, MF 4.99K 1/4W 1%	6	EA	R311,R328,R355,R356,R359,R379
RM0276	RES, MF 294K 1/4W 1	1	EA	R365
RM0304	RES, MF 7.87K 1/4W 1%	2	EA	R305,R306
RM0336	RES, MF 47 ohms 0.6W 1% FLMPROOF	1	EA	R385
RM0339	RES, MF 10 ohms 0.6W 1% FLMEPROOF	2	EA	R396,R397
RM0365	RES, MF 100 ohms 1/4W 1% FLMEPROOF	1	EA	R386
RW0022	RES, WW 0.1 ohms 2W 5%	4	EA	R346,R347,R393,R394
RX0072	RES, MO 100 ohms 1W 5%	1	EA	R3102
RX0074	RES, MO 4.7K 1W 5	2	EA	R325,R343
RX0097	RES, MO 3.9K 2W 5%	1	EA	R348
RP0056	POT, 5K 8MM HOR TOP ADJ/COVER	2	EA	RP301,RP302
	Misc.			
480022	SUB, #18B 6" 1/4 STRIP/187X032	1	EA	FO308
480028	SUB, #18R 6" 1/4 STRIP/187X032	1	EA	FO309
MT0005	TERM, KWIKDISC .187 16-20 AWG	2	EA	USED ON ONE END OF 480022 AND 480028
540130	IND, CM CHOKE 150UH ELYTONE	1	EA	L302
BF0007	BEAD, FERRITE	1	EA	L301
JH0008	CNCTR, HEADER 5PIN .100CTR	1	EA	J302
JH0016	CNCTR, HEADER 2PIN .100CTR	1	EA	J303
JH0074	CNCTR, HEADER 8PIN LOCKING .1C	1	EA	J301
KS0017	THERMISTOR, 100K @ 25C NTC	2	EA	TH302,TH303
KS0019	THERMISTOR, PTH9L04BD22TS2F510	1	EA	TH301
MT0003	TERM, KWIKDISC .25 PCB MT	1	EA	FO304
MT0023	TERM, FASTON MALE PCMT 187X032	4	EA	FO301,FO302,FO310,FO311
MT0036	TERM, FASTON MALE PCMT 205X032	1	EA	FO303
810066	MET, HTSNK CLIP HPS SERIES	12	EA	USED WITH D305,Q306,Q307,U302,U303,Q310,Q311,Q312,Q319, Q320,Q321,D324
HS0062	SCREW, #6-1/2 TYPE B PP BLK	4	EA	USED WITH THE STANDOFFS
MS0014	MISC, CERAMIC PLATE TO-220	1	EA	USED WITH D324
MS0017	MISC, CERAMIC PLATE TO-220	11	EA	USED WITH Q305,Q306,Q307,U302,U303,Q310, Q311,Q312,Q319,Q320,Q321
MZ0033	STANDOFF, 3/16" EXP GROMMET FR	4	EA	
620007	**PCB, AC FILTER**	**1**	**EA**	
	Transistors			
QB0002	TRANS, NPN 40V .6A TO92 2N4401	1	EA	Q501
	Diodes			
DR0038	RECT, 1A 400V GENERAL 1N4002	4	EA	D502,D503,D504,D505
DS0001	RECT, 100mA 75V SIGNAL 1N4148T	1	EA	D512
DZ0029	ZENER, 500MW 5V1 5% 1N5231B	2	EA	D513,D514
DB0006	RECT, 8A 400V BRIDGE	1	EA	D501
DL0014	LED, 3MM BICOLOR RED/GR	4	EA	D507,D09,D510,D511 SOLDERED ON THE BOTTOM OF THE PCB

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
UV0013	VREG, +5V 100MA TO220 LM7805CT	1	EA	U501
	Resistors			
RC0004	RES, CF 1.0M 1/4W 5%	1	EA	R501
RX0096	RES, MO 2.2K 1W 5%	1	EA	R502
RX0083	RES, MO 150 ohms 3W 5	1	EA	R503
RC0273	RES, ZERO OHM 1/4W	2	EA	JUMPER LEADS LOOPED AROUND SWITCH TERMINALS (SW501)
	Capacitors			
CE0003	CAP, E 2.2UF 50V 20% 105C	2	EA	C505,C506
CE0103	CAP, E 100UF 35V 85DEG	2	EA	C503,C504
CF0057	CAP, FX .22UF 250V 10%	2	EA	C501,C502
	Misc.			
500103	XFMR, POWER 60HZ 24V 1.1VA	1	EA	T501
540126	IND, CHOKE CM YT7271	1	EA	L501
JH0008	CNCTR, HEADER 5PIN .100CTR	1	EA	J502
JH0044	CNCTR, HEADER 3PIN .156CTR	1	EA	J501
KV0001	VARISTOR, 275V 100J .6W	1	EA	Z501
MT0023	TERM, FASTON MALE PCMT 187X032	2	EA	FO501,FO502
SR0009	SWITCH, PUSH TV5	1	EA	SW501
SR0038	SWITCH, RELAY SPST TV5 5A 12V	1	EA	SW502
810088	MET, HTSNK 1X2 BRIDGE	1	EA	USED ON D501
DL0027	LED, MOUNT PRELUDE	1	EA	FOR THE LEDS MOUNTED ON BOTTOM OF PCB
HN0006	NUT, HEX KEP #6-32 ZNP	1	EA	USED ON HEATSINK BRIDGE
HS0006	SCREW, #6-32X3/8 100 PHIL ZNP	1	EA	USED WITH HEATSINK BRIDGE
HS0044	SCREW, #4-1/4 TYPE A PP ZNP	2	EA	USED FOR THE SWITCH AND P/BUTTON HOLDER
HS0049	SCREW, #6-3/4 TYPE B PP BLK	3	EA	USED WITH THE STANDOFFS
MZ0035	STANDOFF, 3/8" EXP GROMMET FR	3	EA	
RP0095	POT, KNOB PRELUDE POWER	1	EA	ON THE POWER SWITCH
640016	**PCB, POWER SUPPLY**	**1**	**EA**	
	Transistors			
QB0018	TRANS, PNP 150V 0.6A 2N5401	1	EA	Q401
QM0055	MOSFET, IRF740 TO220AB IR ONLY	4	EA	Q403,Q404,Q406,Q407
	Diodes			
DR0084	RECT, 8A 600V ULTRAF MUR1660CT	2	EA	D407,D408
DR0086	RECT, 1A 600V ULTRAFAST MUR160	3	EA	D403,D404,D406
DS0002	RECT, 100MA 200V SIGNAL 1N3070	2	EA	D409,D410
DZ0021	ZENER, 500MW 15V 5% 1N5245B	8	EA	Z401,Z402,Z403,Z404,Z405,Z406,Z407,Z408
	Capacitors			
CC0087	CAP, CA .01UF 100V 20%	2	EA	C409,C421

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
CE0013	CAP, E 47UF 50V 20%	3	EA	C415,C416,C418
CF0093	CAP, F 4700PF 100V 5% 5MMLS	4	EA	C406,C408,C412,C414
CE0040	CAP, E 680UF 200V 30X35 85DEG	6	EA	C401,C402,C403,C422,C423,C424
CF0020	CAP, FY2 4700PF 250V 20%	1	EA	C428
CF0050	CAP, F .1UF 250V 10% 10MMLS	2	EA	C426,C427
CF0127	CAP, F .22UF 250V 10% 10MMLS	2	EA	C430,C431
	Resistors			
RC0138	RES, CF 200K 1/4W 5%	1	EA	R422
RM0001	RES, MF 1K 1/4W 1%	1	EA	R401
RM0012	RES, MF 100 ohms 1/4W 1%	1	EA	R405
RM0075	RES, MF 475 ohms 1/4W 1%	8	EA	R406,R408,R409,R411,R413,R415,R416,R418
RM0198	RES, MF 205K 1/4W 1%	1	EA	R402
RM0340	RES, MF 22 ohms+B368 1/4W 1% FLAMEPF	8	EA	R407,R410,R414,R417,R419,R420,R425,R426
RX0046	RES, MO 47K 1W 5%	2	EA	R403,R421
	Misc.			
500102	XFMR, POWER 500W YT ETD44	2	EA	T403,T404 CUT AWAY PIN #18 BOTH LOCATIONS
DD0003	RECT, 1A2 60V DIAC	1	EA	Q402
JH0008	CNCTR, HEADER 5PIN .100CTR	1	EA	J401
KS0021	SURGISTOR, 4R 8A 70J SL154R008	1	EA	TH401
MT0023	TERM, FASTON MALE PCMT 187X032	4	EA	FO401,FO402,FO403,FO404
810066	MET, HTSNK CLIP HPS SERIES	6	EA	
810089	MET, HTSNK PRELUDE PWR SUPPLY	1	EA	
810090	MET, HTSNK PRELUDE DIODE	1	EA	
HN0006	NUT, HEX KEP #6-32 ZNP	1	EA	
HS0049	SCREW, #6-3/4 TYPE B PP BLK	4	EA	USED ON STANDOFFS
HS0060	SCREW, #6-32X3/8 PAN PHIL BLK	4	EA	
HW0004	WASHER, SPLIT #6 ZNP	4	EA	
MZ0032	STANDOFF, 1/4" EXP GROMMET FR	4	EA	
480033	SUB, #18R 4" 187X032/187X032	2	EA	FO403(OUT+) ON POWER SUPPLY TO FO301(DC+) FO501(DC+LIVE)ON EMI TO FO401(IN+) ON POWER SUPPLY
480083	SUB, #18B 4" 187X032/187X032	2	EA	FO404 (OUT-) ON POWER SUPPLY TO FO301(DC+) ON LINEAR/CLASS D FO502(DC-LIVE) ON EMI TO FO402(IN-) ON POWER SUPPLY
480104	SUB, #16X2 24" 205X032/205X032	1	EA	SPEAKER WIRE
HS0085	SCREW, #10-32X3/4 PAN PHIL BLK	2	EA	TO MOUNT RABOS COVER TO CHASSIS ECR 01/20/00 JODI
JC0079	CNCTR, FEM-FEM HARNESS 5PIN 7"	1	EA	J401 ON PWR SUPPLY TO J302
JC0111	CNCTR, 8PIN RIBBON CABLE 3"	1	EA	J301 ON LINEAR/CLASSD TO J202 ON FEATURE
JC0154	CNCTR, FEM-FEM HARNESS 6P 40"	1	EA	J105 ON INPUT TO J201 ON FEATURE
JC0155	CNCTR, FEM-FEM HARNESS 5P 22"	1	EA	J104 ON INPUT TO J502 ON EMI
JC0156	CNCTR, 2PIN FEM/2XFEM FASTON	1	EA	J501 ON EMI TO IEC/FUSEHOLDER ON INPUT ASSY
MT0005	TERM, KWIKDISC .187 16-20 AWG	8	EA	ON EACH END OF 480033 AND 480083

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Prelude Amp Assembly Parts List (Cont.)

630049 PCB, INPUT

Part#	Description	Qty		Designator
UA0003	OPAMP, QUAD 14PIN DIL LM324N	1	EA	U103
UA0009	OPAMP, QUAD 14P DIL TL074/084	1	EA	U102
UA0010	OPAMP, DUAL 8PIN DIL TL082	1	EA	U101
UF0012	FOTO, 6PIN 4N35	1	EA	U104
	Capacitors			
CC0025	CAP, CA 1000PF 100V 10%	2	EA	C114,C116
CC0072	CAP, CA 100PF 100V 10%	4	EA	C101,C108,C112,C117
CC0082	CAP, CA .1UF 50V 20%	1	EA	C113
CC0087	CAP, CA .01UF 100V 20%	1	EA	C120
CE0098	CAP, E 22UF 50V 20% 5X11 .2LS	3	EA	C111,C118,C119
CE0103	CAP, E 100UF 35V 85DEG	1	EA	C115
CE0116	CAP, E 2.2UF 50V BIPOLAR 6X11	1	EA	C107
CF0088	CAP, F .01UF 100V 5% 5MMLS	2	EA	C109,C110
CF0092	CAP, F 1000PF 100V 5% 5MMLS	1	EA	C121
CF0118	CAP, F .33UF 63V 10% 5MMLS	1	EA	C106
CF0125	CAP, F .068UF 100V 5% 5MMLS	2	EA	C103,C105
CF0128	CAP, F .033UF 100V 5% 5MMLS	2	EA	C102,C104
	Diodes			
DR0038	RECT, 1A 400V GENERAL 1N4002	6	EA	D103,D104,D106,D107,D108,D109
DS0001	RECT, 100mA 75V SIGNAL 1N4148T	2	EA	D101,D105
DZ0013	ZENER, 500MW 5.6V 5% 1N5232B	1	EA	Z101
	Resistors			
RC0003	RES, CF 1K+B368 1/4W 5%	1	EA	R127
RC0006	RES, CF 10K 1/4W 5%	5	EA	R126,R134,R137,R139,R140
RC0009	RES, CF 10 ohms 1/4W 5%	1	EA	R141
RC0039	RES, CF 2.2K 1/4W 5%	4	EA	R128,R129,R135,R138
RC0083	RES, CF 100K 1/4W 5%	2	EA	R107,R125
RC0111	RES, CF 680 ohms 1/4W 5%	1	EA	R124
RC0115	RES, CF 47K 1/4W 5%	1	EA	R131
RC0135	RES, CF 150K 1/4W 5%	1	EA	R133
RC0273	RES, ZERO OHM 1/4W	2	EA	R111,R115
RC0277	RES, CF 5.6M 1/4W 5%	1	EA	R136
RC0281	RES, CF 510K 1/4W 5%	1	EA	R130
RM0001	RES, MF 1K 1/4W 1%	1	EA	R142
RM0002	RES, MF 10K 1/4W 1%	3	EA	R118,R119,R120
RM0011	RES, MF 100K 1/4W 1%	2	EA	R103,R104
RM0106	RES, MF 14K 1/4W 1%	1	EA	R121
RM0113	RES, MF 20K 1/4W 1%	2	EA	R116,R117
RM0142	RES, MF 287K 1/4W 1%	1	EA	R123
RM0180	RES, MF 4.99K 1/4W 1%	2	EA	R105,R106
RM0193	RES, MF 42.2K 1/4W 1%	4	EA	R108,R109,R112,R113
RM0290	RES, MF 143K 1/4W 1	1	EA	R122
RX0001	RES, MO 1K 1W 5%	2	EA	R101,R102

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Prelude Amp Assembly Parts List (Cont.)

Part#	Description	Qty		Designator
QM0035-S	JFET, J111 SELECTED TR ONLY	1	EA	Q101
JC0064	DC POWER JACK 2MM DIA	1	EA	J103
JC0106	CNCTR, DUAL RCA VERT MT BLK/GD	1	EA	J101
JH0004	CNCTR, HEADER 6PIN .100CTR	1	EA	J105
JH0008	CNCTR, HEADER 5PIN .100CTR	1	EA	J104
MM0025	MISC, PC MT SCREW TERM 6-32	1	EA	W101
MT0023	TERM, FASTON MALE PCMT 187X032	4	EA	FO101,FO102,FO103,FO104
SR0034	SWITCH, SLIDER DPDT VERT	1	EA	SW101
480007	SUB, #18B 4" 1/4 STRIP/187X032	2	EA	TO BLACK BP TO FO101 TO IEC CNCTR/FUSE HOLDER
480029	SUB, #18R 4" 1/4 STRIP/187X032	1	EA	SOLDERED TO RED BP TO FO104
FH0006	FUSE, HOLDER PANEL MT	1	EA	ON THE PANEL
FS0027	FUSE, 6A 250V 1.25X.25 GLASS	1	EA	FUSE
HS0054	SCREW, #4-1/2 TYPE AB PP BLK	1	EA	USED ON THE DUAL RCA JACK
HS0065	SCREW, #6-32X1/4 PAN PHIL BLK	1	EA	USED WITH THE ZENER DIODE
HS0076	SCREW, #6-32X3/8 100 PHIL ZNP	3	EA	USED WITH THE STANDOFFS
JC0129	CNCTR, AC IEC SOCKET .250 2PIN	1	EA	ON THE PANEL
JC0150	CNCTR, SINGLE BP RED METAL	1	EA	ON THE PANEL
JC0151	CNCTR, SINGLE BP BLK METAL	1	EA	ON THE PANEL
MZ0017	STANDOFF, .2" NYLON LOCKING	3	EA	BOARD ON THE PANEL

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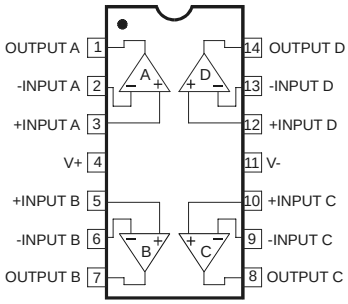
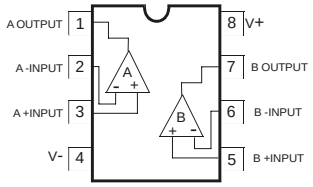
Integrated Circuit Diagrams

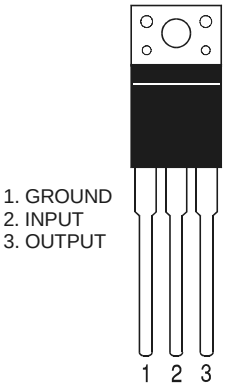
OPAMP, QUAD 14P DIL TL074/084, LM324N
COMPARATOR U102, U103, U201, U202, U203,
U301, U306



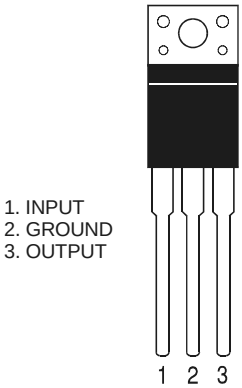
OPAMP, DUAL 8PIN DIL TL082
U101



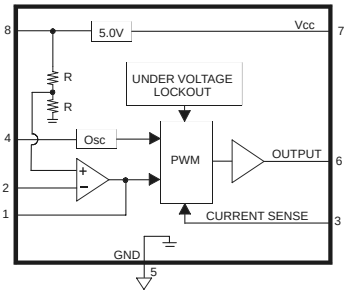
-5V TO220 LM7905CT
REGULATOR
U303, 502



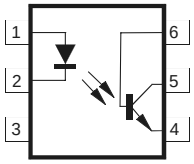
+5V TO220 LM7805CT
REGULATOR
U302, 501



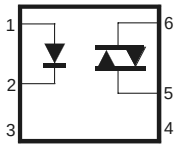
PWM, 8PIN DIL UC3842N
U307



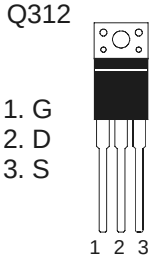
FOTO, 6PIN 4N35
U104



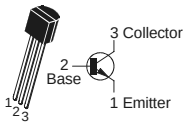
FOTO, 6PIN MOC3012
U304



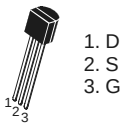
IRFZ40, Q403, Q404, Q406, Q407
MOSFET, IRF640/9640, T0220AB
Q305, Q310, Q320, Q321, Q306,
Q307, Q311, Q312



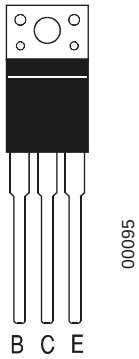
TRANS, NPN 150V 0.6A 2N5551, 2N4401,
Q303, Q308, Q314, Q315, Q317,Q322, Q323,
Q204, Q501



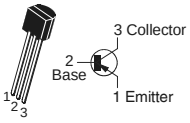
JFET, Q201, Q202,
Q205, Q301, Q101



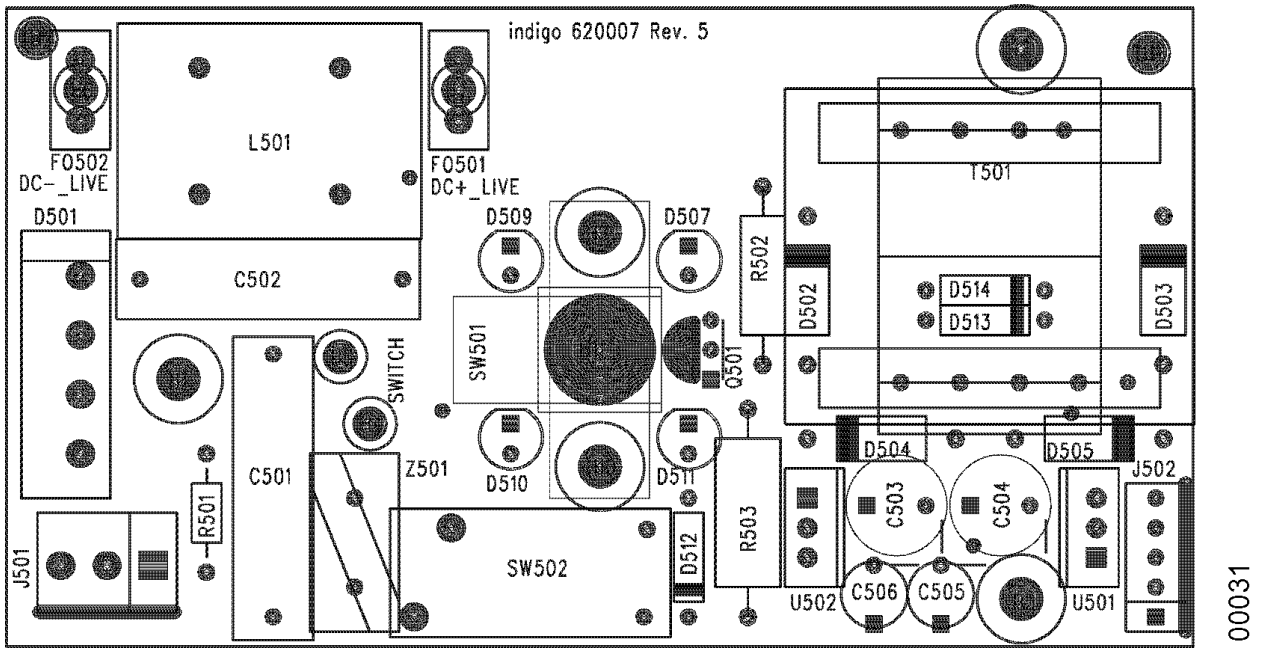
TRANS, NPN 250V 1A
T0220 TIP47C Q319



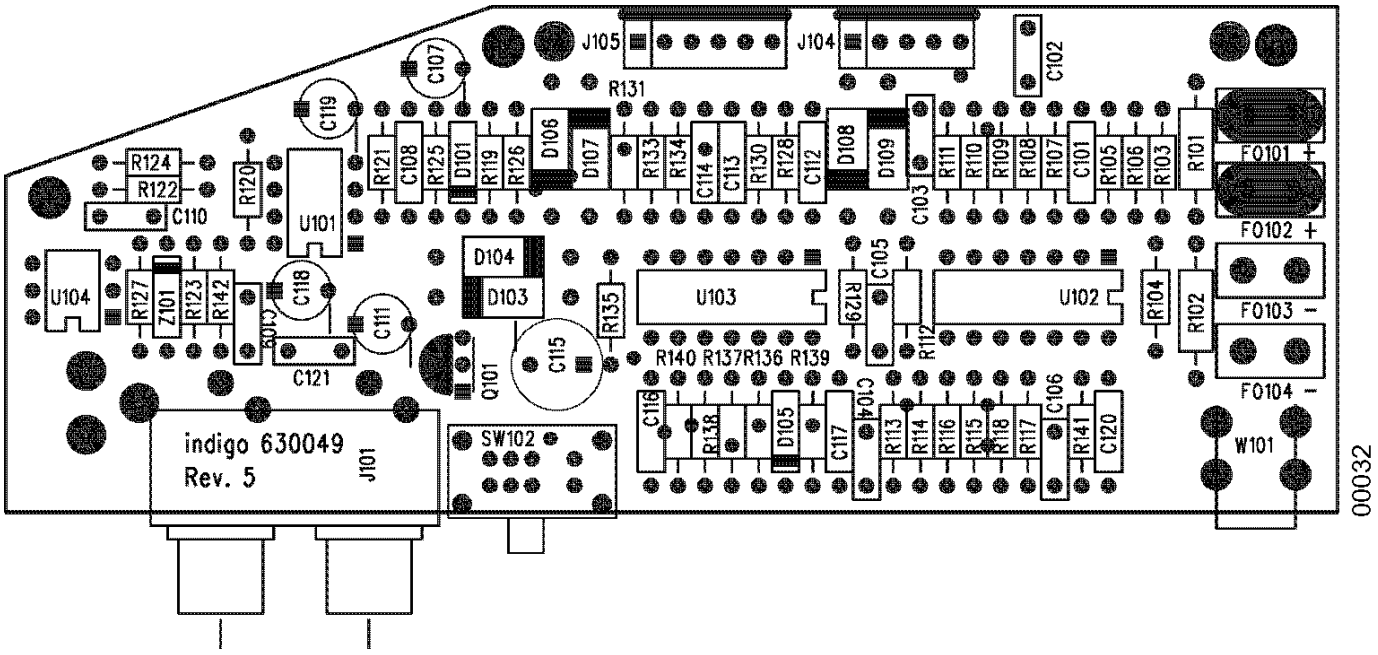
TRANS, PNP 150V 0.6A 2N5401,Q302,
Q304, Q309, Q313, Q316, Q324, Q401



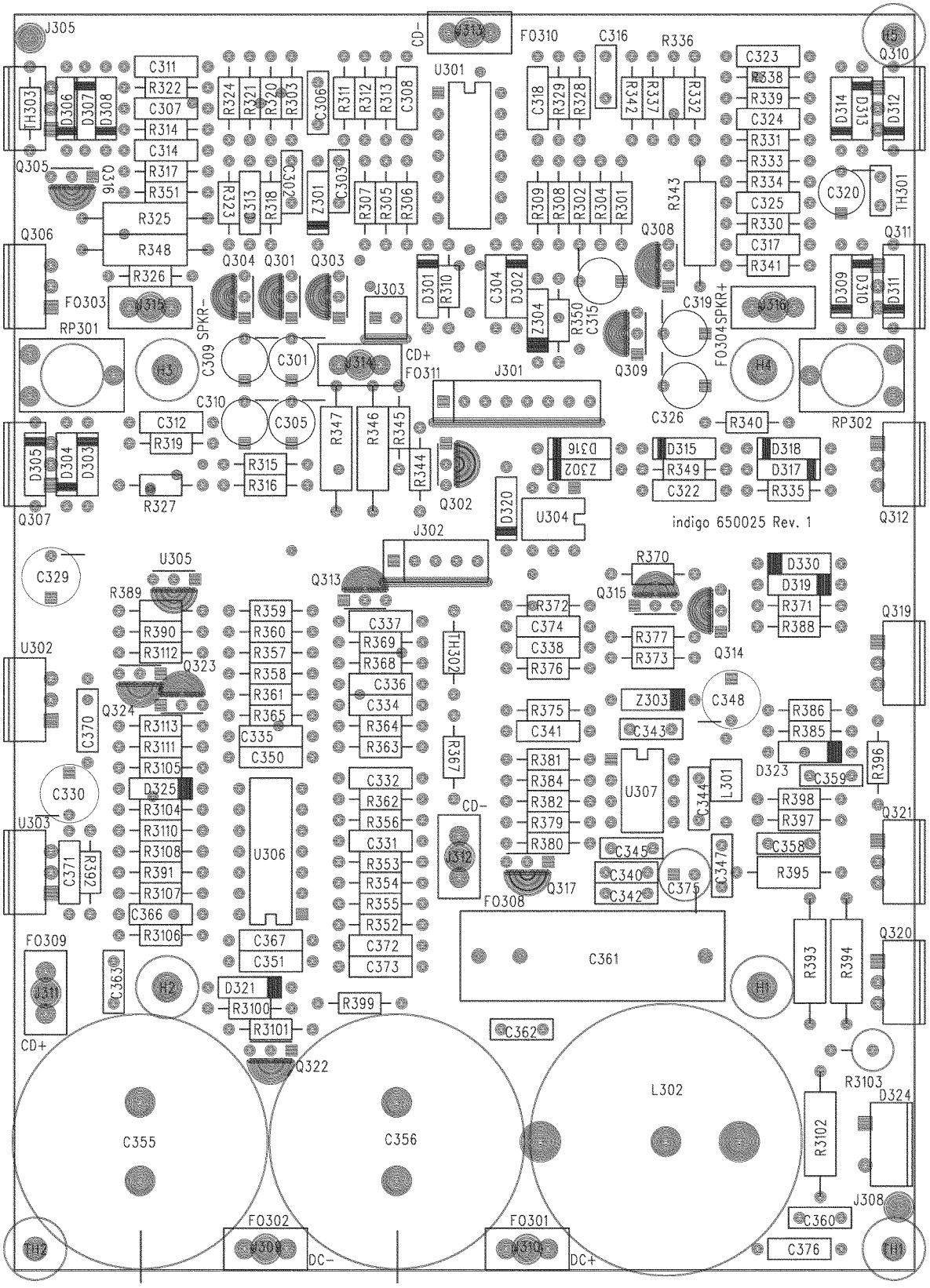
EMI PCB (AC Filter)



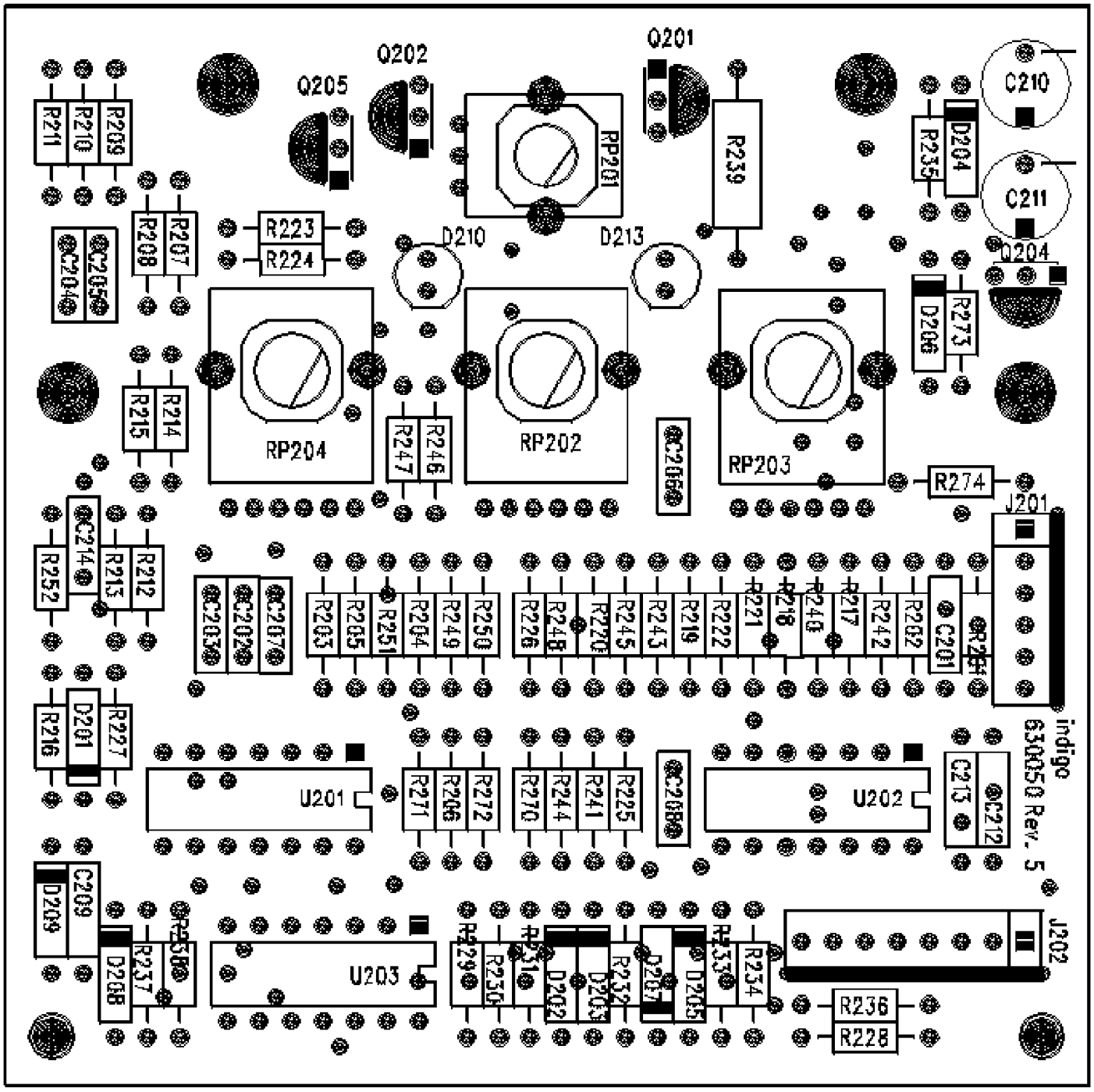
Input PCB



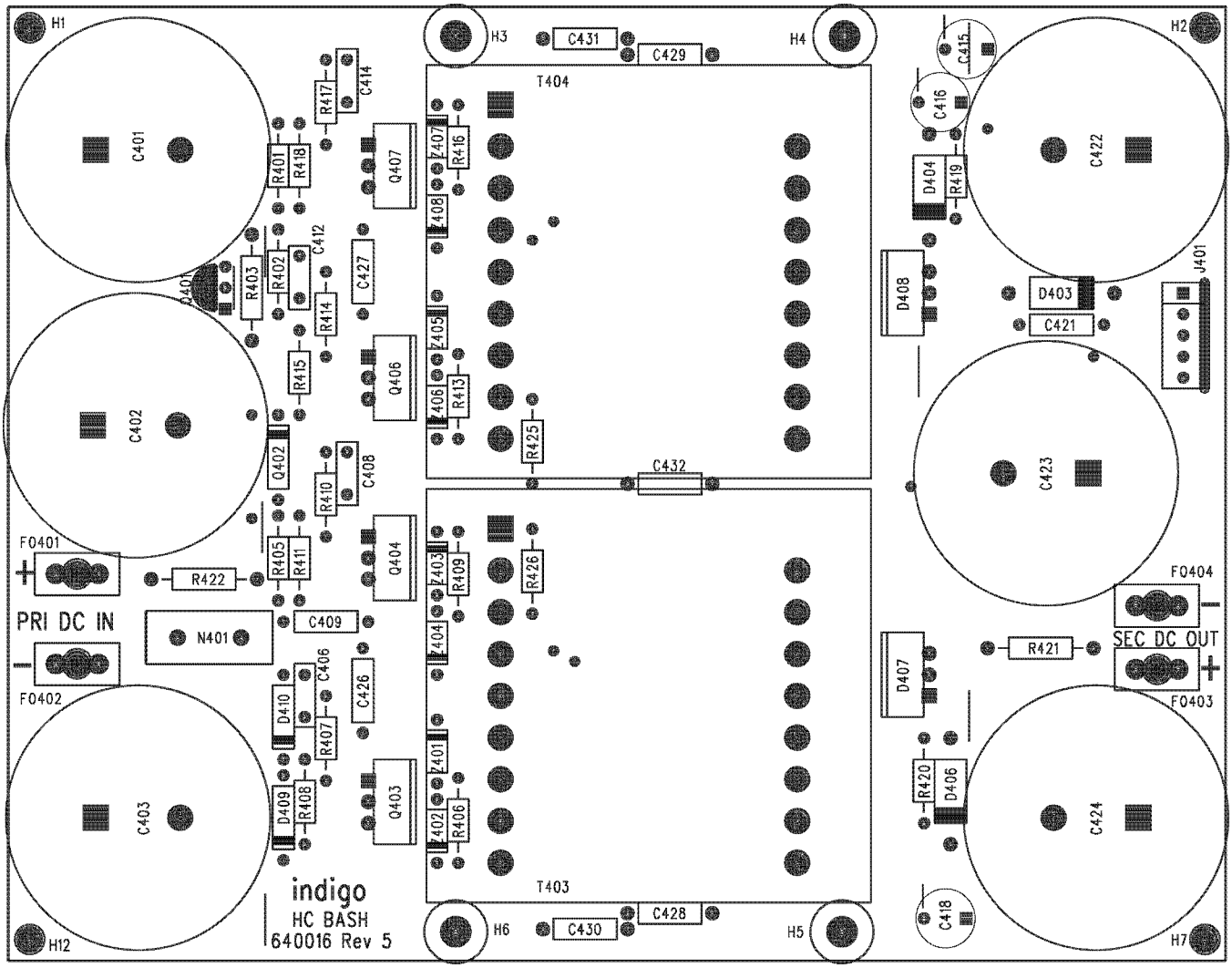
Linear/Buck PCB



Feature PCB

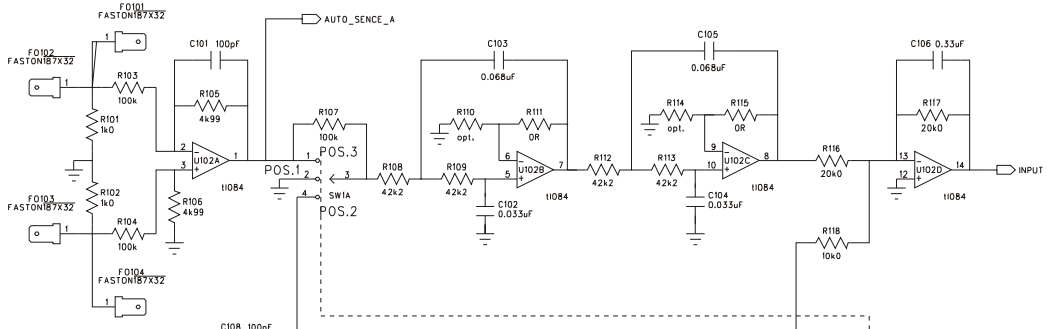

Q201
Q202
Q205
RP201
RP202
RP203
RP204
D210
D213
C210
C211
Q204
R211
R210
R209
R208
R207
R223
R224
R239
R235
D204
D206
R273
R215
R214
R247
R246
R274
J201
R252
R213
R212
R203
R205
R251
R204
R249
R250
R226
R248
R220
R245
R243
R219
R222
R221
R218
R240
R217
R242
R202
C201
R216
D201
R227
U201
R271
R206
R272
R270
R244
R241
R225
U202
C213
C212
indigo
630650 Rev. 5
C209
D209
D208
R237
U203
R229
R230
R231
D202
D203
R232
D206
D205
R233
R234
J202
R236
R228
00111

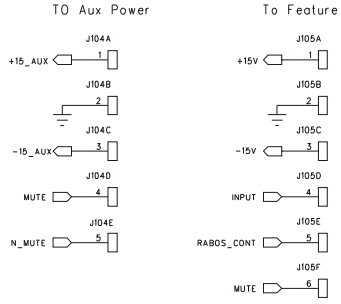
Power Supply PCB

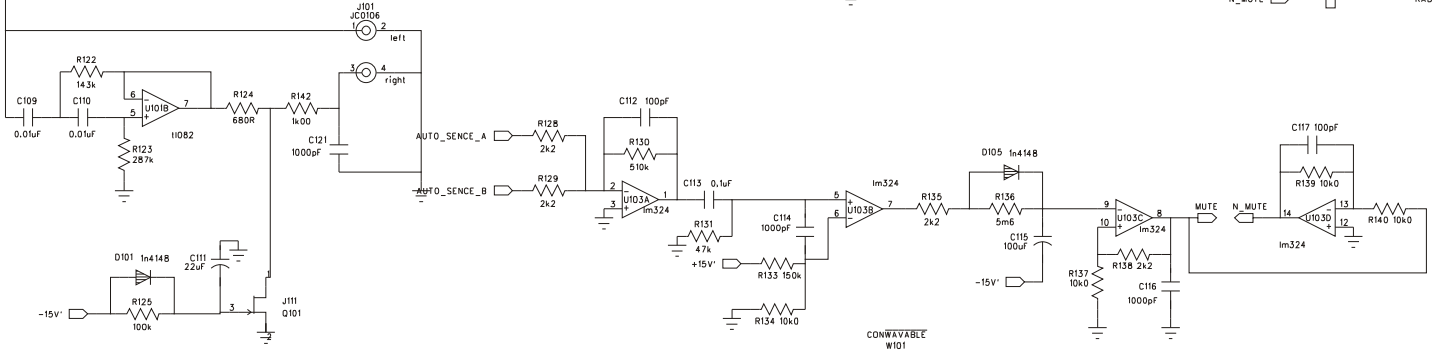


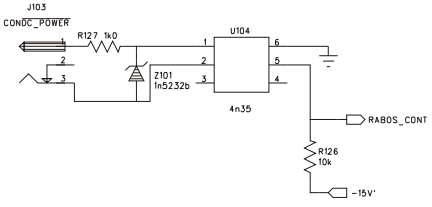
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	First entry		22/02/99
2	Revised for A/V control		19/04/99
3	Add opto for RABOS		20/04/99
4	Add Auto On/Off		28/04/99
5	Add Aux Power		04/05/99
6	Chg. Part Decals		10/05/99
7	Correct values & PCBr2		09/06/99
8	[illegible]		Jun 21 99

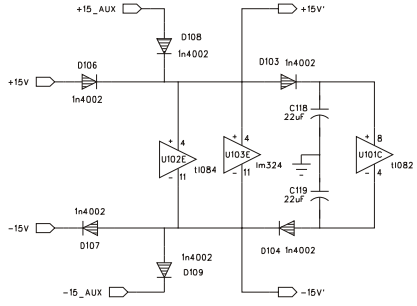
Mode	Input	X-Over
1	RCA	OFF
2	RCA	ON
3	HiLvl	ON

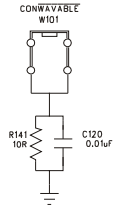




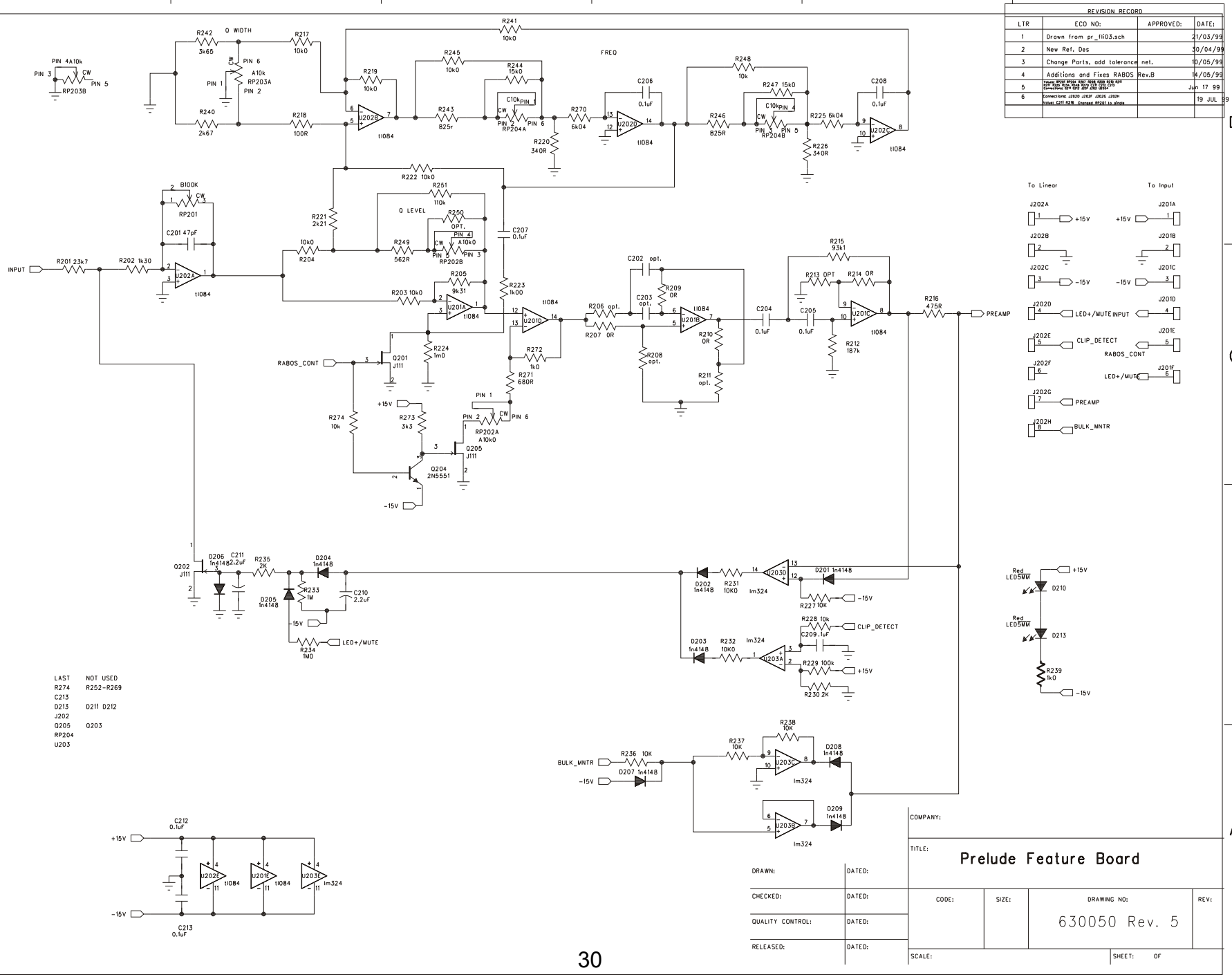


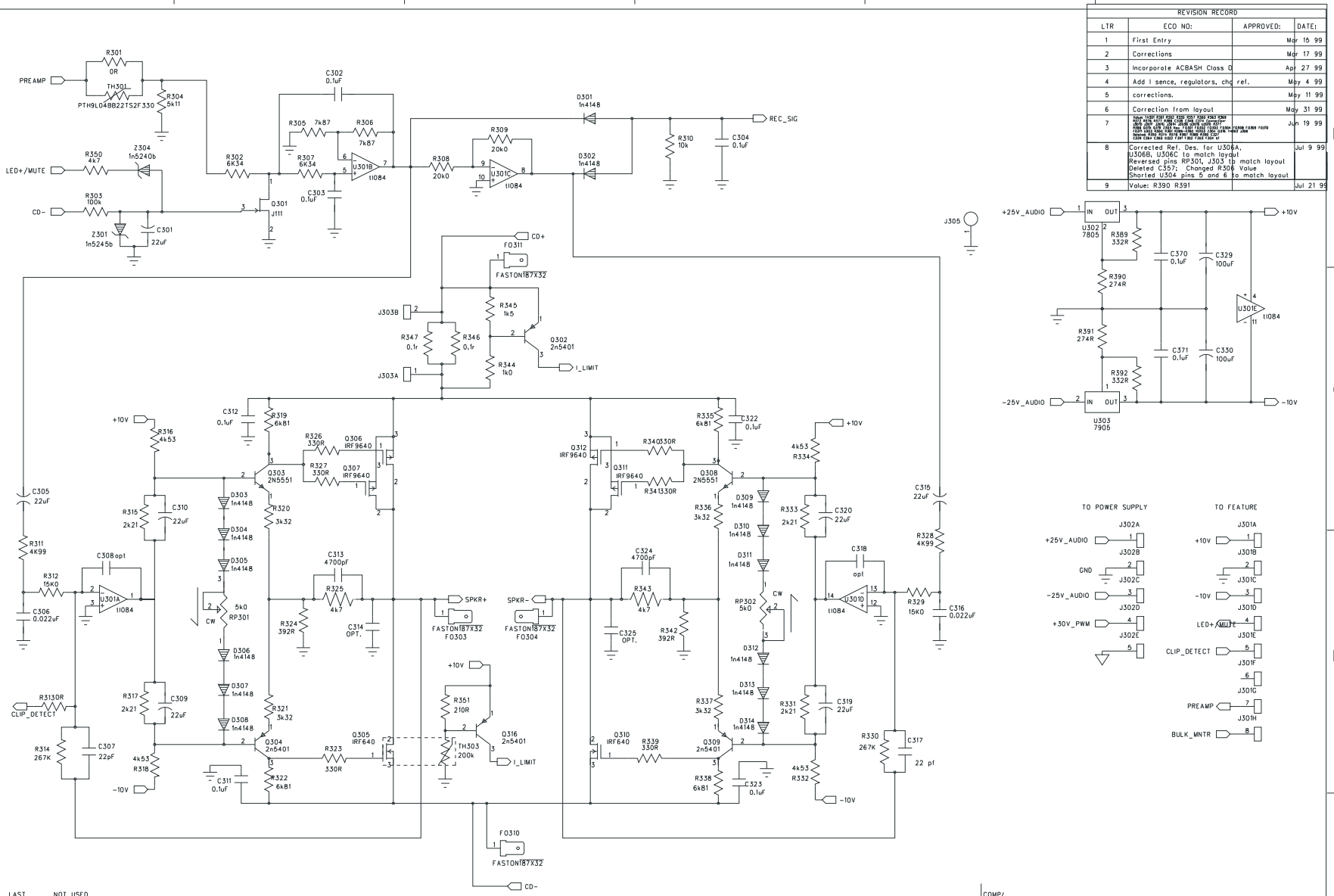






DRAWN: C.L.	DATED: 22/02/99	TITLE: Prelude Input Board		
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: 630049 Rev. 5 / REV:
QUALITY CONTROL:	DATED:			
RELEASED:	DATED:	SCALE:		SHEET: OF


REVISION RECORD
LTR | ECO NO: | APPROVED: | DATE:
1 | Drawn from pr_fil03.sch | | 21/03/99
2 | New Ref. Des | | 30/04/99
3 | Change Parts, add tolerance net. | | 10/05/99
4 | Additions and Fixes RABOS Rev.B | | 14/05/99
5 | | | Jun 17 99
6 | | | 19 JUL 99
Q WIDTH
FREQ
Q LEVEL
INPUT
PREAMP
RABOS_CONT
CLIP_DETECT
LED+/MUTE
BULK_MNTR
To Linear
To Input
LAST NOT USED
R274 R252-R269
C213
D213 D211 D212
J202
Q205 Q203
RP204
U203
COMPANY:
TITLE:
Prelude Feature Board
DRAWN:
CHECKED:
QUALITY CONTROL:
RELEASED:
DATED:
CODE:
SIZE:
DRAWING NO:
630050 Rev. 5
REV:
SCALE:
SHEET: OF



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	First Entry		Mar 15 99
2	Corrections		Mar 17 99
3	Incorporate ACBASH Class D		Apr 27 99
4	Add I sence, regulators, chg ref.		May 4 99
5	corrections.		May 11 99
6	Correction from layout		May 31 99
7	[illegible]		Jun 19 99
8	Corrected Ref. Des. for U306A, U306B, U306C to match layout Reversed pins RP301, J303 to match layout Deleted C357; Changed R306 Value Shorted U304 pins 5 and 6 to match layout		Jul 9 99
9	Value: R390 R391		Jul 21 99

LAST	NOT USED
R3113	R366 R374 R378 R383 R387 R3109
C376	C321 C327 C328 C333 C339 C346 C349 C352-C354 C357 C364 C365 C368 C369
D330	D322 D326-D329
Q324	Q31B
U307	
Z304	
TH303	
L302	
J30B	J304 J306 J307

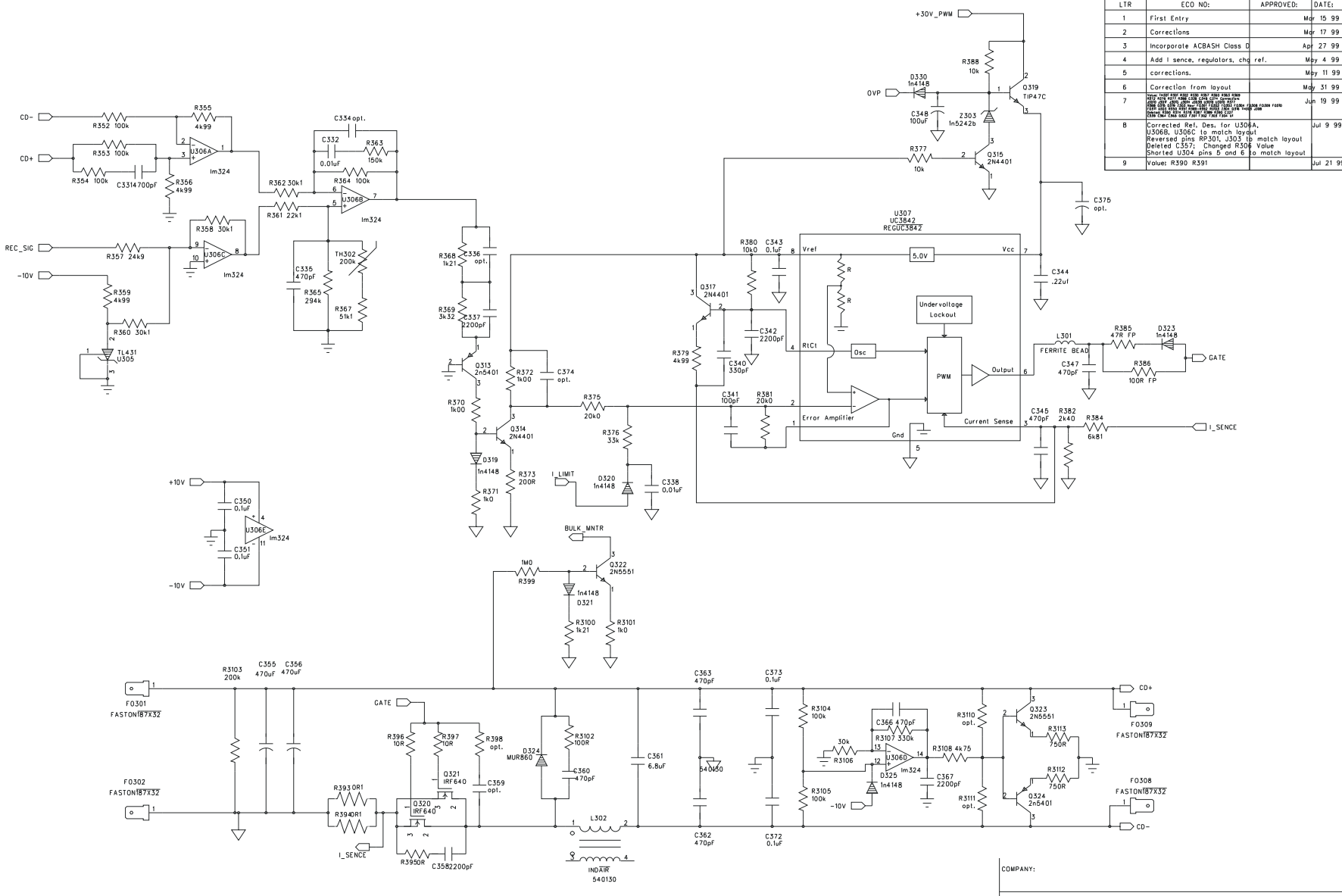
DRAWN:	DATED:
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMP/

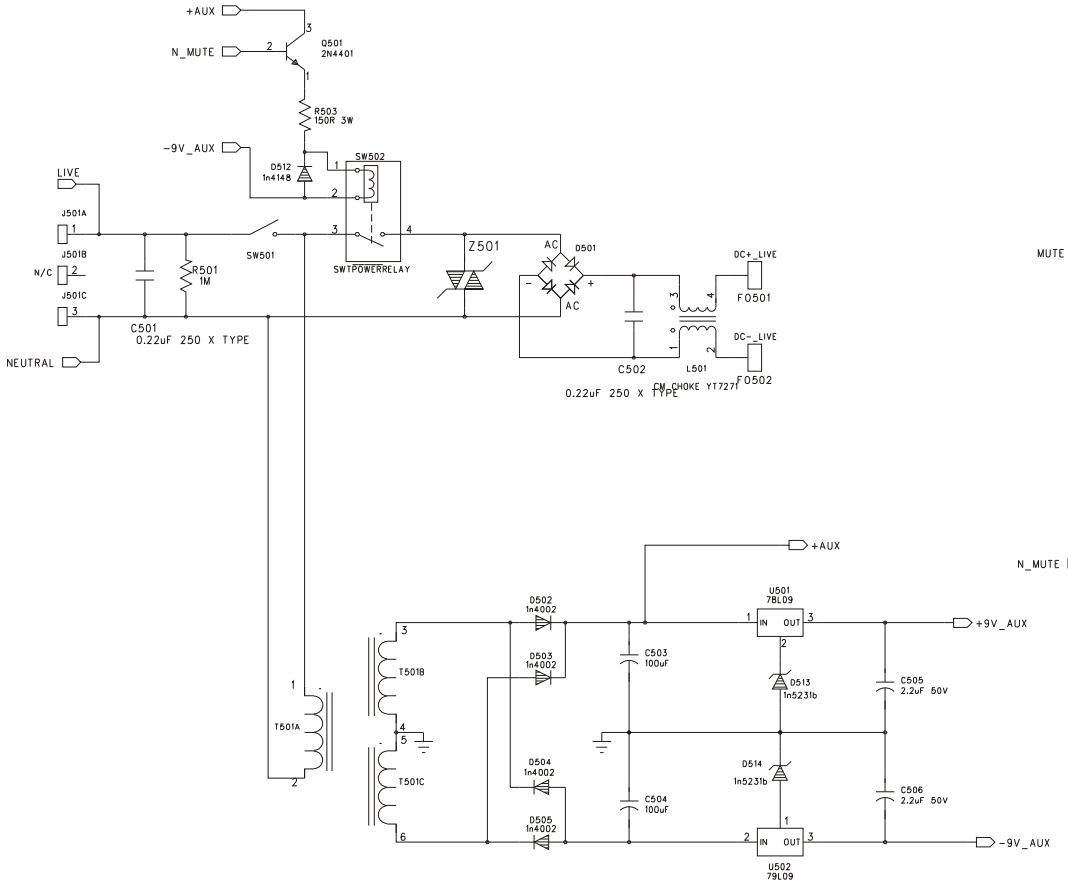
TITLE: Prelude Linear/Buck

CODE:	SIZE:	DRAWING NO:	REV:
		650025 Rev. 1	

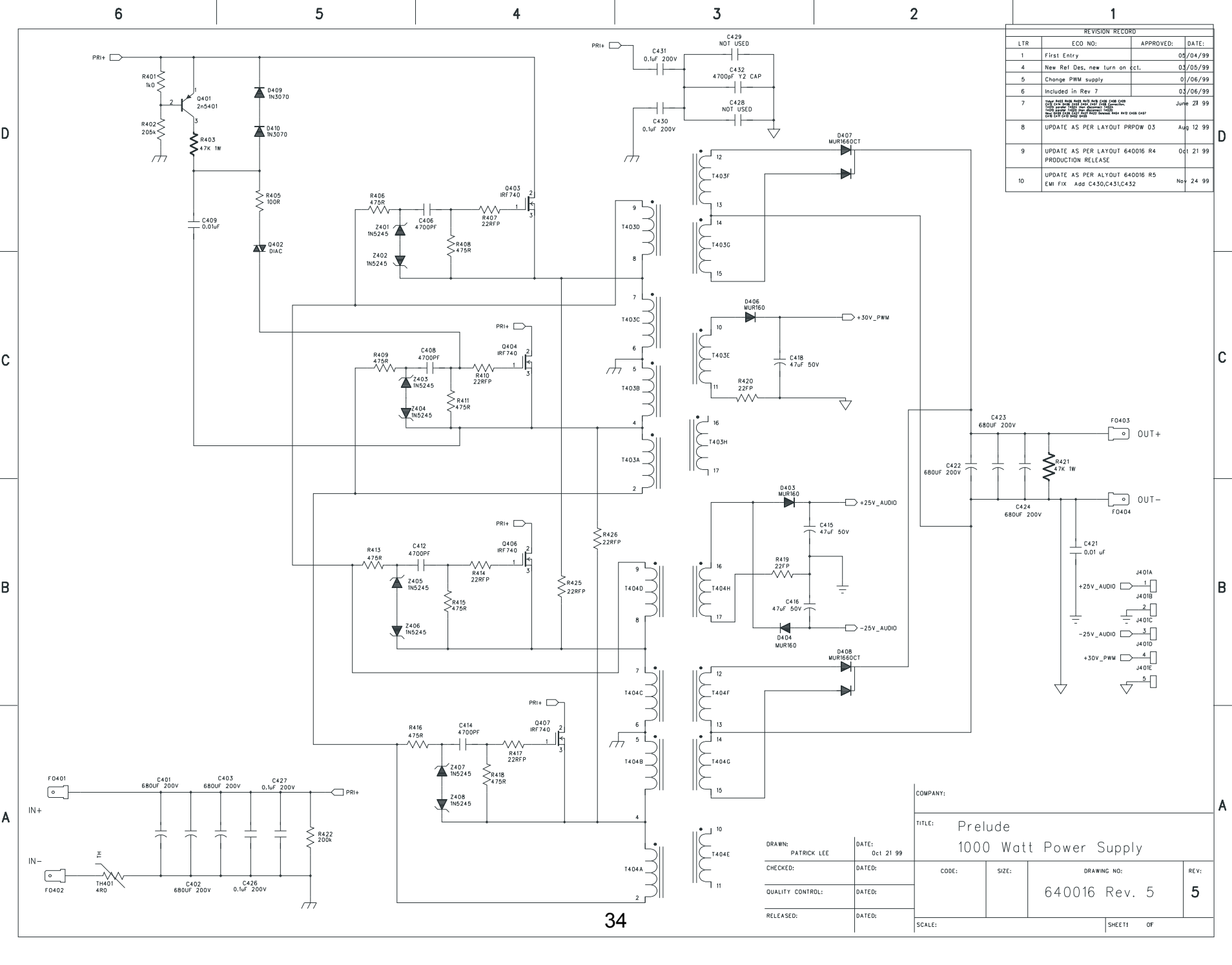
SCALE: | SHEET: 1 of 2

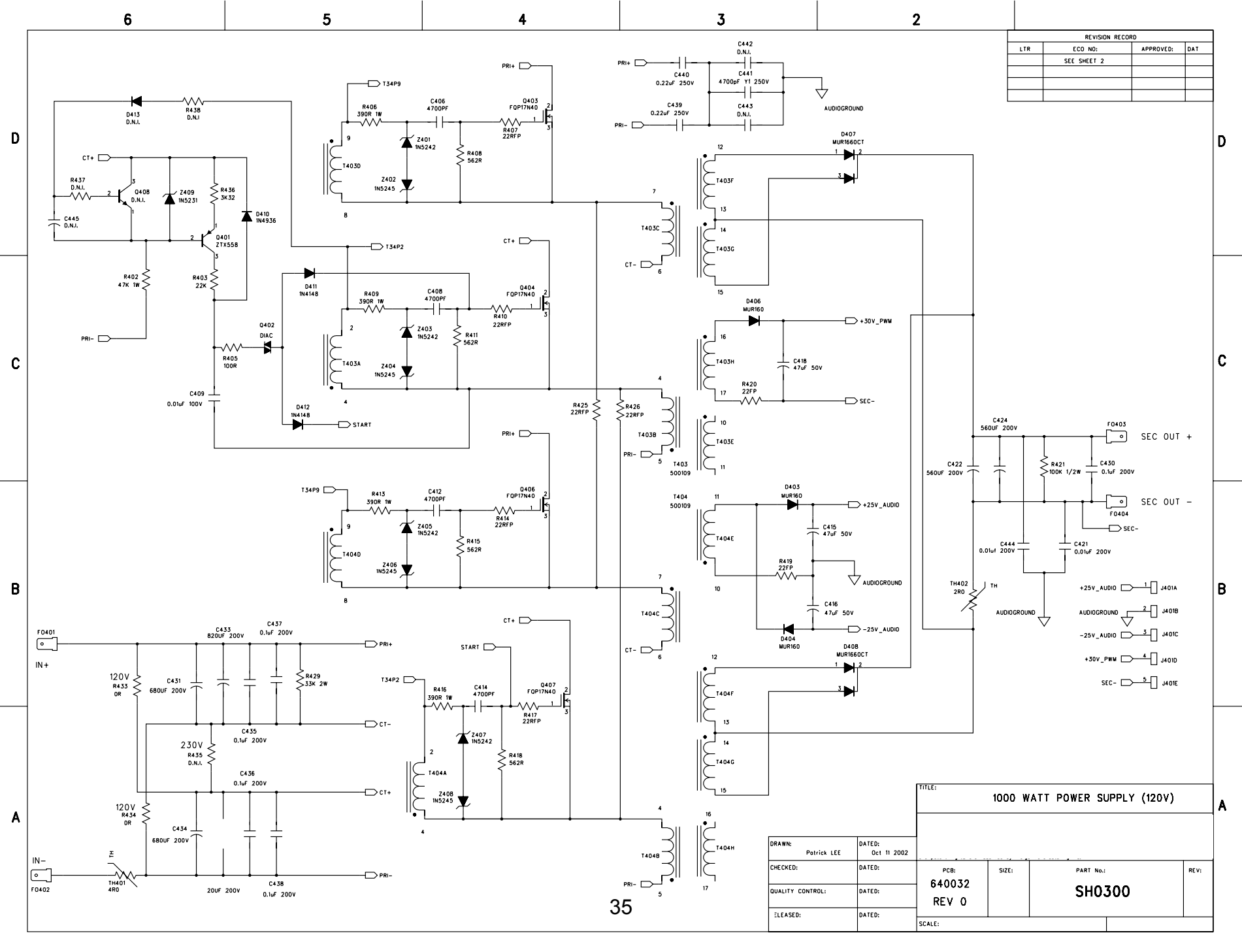

REVISION RECORD
LTR | ECO NO: | APPROVED: | DATE:
1 | First Entry | Mar 15 99
2 | Corrections | Mar 17 99
3 | Incorporate ACBASH Class D | Apr 27 99
4 | Add I sence, regulators, chg ref. | May 4 99
5 | corrections. | May 11 99
6 | Correction from layout | May 31 99
7 | Jun 19 99
8 | Corrected Ref. Des. for U306A, U306B, U306C to match layout Reversed pins RP301, J303 to match layout Deleted C357; Changed R306 Value Shorted U304 pins 5 and 6 to match layout | Jul 9 99
9 | Value: R390 R391 | Jul 21 99
+30V_PWM
OVP
CD-
CD+
REC_SIG
-10V
+10V
I_SENCE
I_LIMIT
BULK_MNTR
GATE
+BUCKREG
U306A
U306B
U306C
U306D
U306E
lm324
U307
UC3842
REGUC3842
Vref
5.0V
Vcc
Undervoltage Lockout
Osc
PWM
Output
Error Amplifier
Current Sense
Gnd
RtCt
TL431
U305
INDAIR
540130
FO301
FO302
FO308
FO309
FASTON187X32
tbd.
COMPANY:
TITLE: Prelude Linear/Buck
DRAWN:
CHECKED:
QUALITY CONTROL:
RELEASED:
DATED:
CODE:
SIZE:
DRAWING NO: 650025 Rev. 1
REV:
SCALE:
SHEET: 2 of 2

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	Entered from HPS1000 EMI		01/06/99
2	[illegible]		Jun 18 99



DRAWN:	DATED:	COMI	
CHECKED:	DATED:	TITLE: Prelude EMI Board	
QUALITY CONTROL:	DATED:	CODE:	SIZE:
RELEASED:	DATED:	DRAWING NO: 620007 Rev. 4	REV:
		SCALE:	SHEET: OF


REVISION RECORD
LTR | ECO NO: | APPROVED: | DATE:
1 First Entry 05/04/99
4 New Ref Des, new turn on cct. 05/05/99
5 Change PWM supply 06/06/99
6 Included in Rev 7 06/06/99
7 June 21 99
8 UPDATE AS PER LAYOUT PRPOW 03 Aug 12 99
9 UPDATE AS PER LAYOUT 640016 R4 PRODUCTION RELEASE Oct 21 99
10 UPDATE AS PER ALYOUT 640016 R5 EMI FIX Add C430,C431,C432 Nov 24 99
PRI+
R401 1k0
Q401 2n5401
R402 205k
R403 47K 1W
D409 1N3070
D410 1N3070
R405 100R
C409 0.01uF
Q402 DIAC
C429 NOT USED
C431 0.1uF 200V
C432 4700pF Y2 CAP
C428 NOT USED
C430 0.1uF 200V
R406 475R
C406 4700PF
Q403 IRF740
R407 22RFP
Z401 1N5245
Z402 1N5245
R408 475R
T403D
T403C
T403B
T403A
R409 475R
C408 4700PF
Q404 IRF740
R410 22RFP
Z403 1N5245
Z404 1N5245
R411 475R
R426 22RFP
R425 22RFP
R413 475R
C412 4700PF
Q406 IRF740
R414 22RFP
Z405 1N5245
Z406 1N5245
R415 475R
T404D
T404C
T404B
T404A
R416 475R
C414 4700PF
Q407 IRF740
R417 22RFP
Z407 1N5245
Z408 1N5245
R418 475R
T403F
T403G
T403E
T403H
T404H
T404F
T404G
T404E
D407 MUR1660CT
D406 MUR160
+30V_PWM
C418 47uF 50V
R420 22FP
D403 MUR160
+25V_AUDIO
C415 47uF 50V
R419 22FP
C416 47uF 50V
D404 MUR160
-25V_AUDIO
D408 MUR1660CT
C423 680UF 200V
C422 680UF 200V
C424 680UF 200V
R421 47K 1W
C421 0.01 uF
FO403
OUT+
FO404
OUT-
J401A
J401B
J401C
J401D
J401E
FO401
IN+
FO402
IN-
C401 680UF 200V
C403 680UF 200V
C427 0.1uF 200V
R422 200k
TH401 4R0
C402 680UF 200V
C426 0.1uF 200V
COMPANY:
TITLE: Prelude
1000 Watt Power Supply
DRAWN: PATRICK LEE
DATE: Oct 21 99
CHECKED:
DATED:
QUALITY CONTROL:
DATED:
RELEASED:
DATED:
CODE:
SIZE:
DRAWING NO: 640016 Rev. 5
REV: 5
SCALE:
SHEET1 OF
34


REVISION RECORD
LTR
ECO NO:
APPROVED:
DAT
SEE SHEET 2
TITLE:
1000 WATT POWER SUPPLY (120V)
DRAWN: Patrick LEE
DATED: Oct 11 2002
CHECKED:
QUALITY CONTROL:
RELEASED:
PCB: 640032 REV 0
SIZE:
PART No.: SH0300
REV:
SCALE:
SEC OUT +
SEC OUT -
SEC-
+25V_AUDIO
AUDIOGROUND
-25V_AUDIO
+30V_PWM
PRI+
PRI-
CT+
CT-
START
IN+
IN-
120V
230V
AUDIOGROUND

Rev.	Date	ECR No.	APPROVED	DESCRIPTION
0	Oct 11 2002		PATRICK LEE	NEW RELEASE (MODIFIED FROM SH0001)
				Board change from 640016R5 to 640024R0
				Q403,Q404,Q406,Q407 changed to FQP17N40 was IRF740
				Added TH402
1	Oct 23 2002		PATRICK LEE	Board changed to 640032R0 was 640024

TITLE:

CHANGE HISTORY

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INDIGO
INDIGO Manufacturing Inc.
165 Steelcase Road East
Markham, ON. L3R 1G1

PCB:		PART No.:	REV:
640032 REV 0		SH0300	1

SHEET: 2 OF 2